

WEBVTT

NOTE duration: "01:31:53.770"

NOTE Confidence: 0.89638734

00:00:09.519 --> 00:00:10.580 Good afternoon, everyone.

NOTE Confidence: 0.9887848

00:00:11.280 --> 00:00:12.639 Thank you for joining us

NOTE Confidence: 0.9887848

00:00:12.639 --> 00:00:13.139 today.

NOTE Confidence: 0.9383029

00:00:14.835 --> 00:00:16.275 First of all, apologies for

NOTE Confidence: 0.9383029

00:00:16.275 --> 00:00:17.015 any inconvenience.

NOTE Confidence: 0.94939905

00:00:18.435 --> 00:00:19.395 We had a lot of

NOTE Confidence: 0.94939905

00:00:19.395 --> 00:00:21.235 registrants, you know, to overflow

NOTE Confidence: 0.94939905

00:00:21.235 --> 00:00:22.515 the room capacity. I was

NOTE Confidence: 0.94939905

00:00:22.515 --> 00:00:24.195 still getting people. Okay. Can

NOTE Confidence: 0.94939905

00:00:24.195 --> 00:00:25.474 I register till the last

NOTE Confidence: 0.94939905

00:00:25.474 --> 00:00:26.755 moment? So I might have

NOTE Confidence: 0.94939905

00:00:26.755 --> 00:00:27.795 told some of you we

NOTE Confidence: 0.94939905

00:00:27.795 --> 00:00:28.755 are out of food and

NOTE Confidence: 0.94939905

00:00:28.755 --> 00:00:30.850 things and all, but I

NOTE Confidence: 0.94939905

00:00:30.850 --> 00:00:32.770 think some people didn't show  
NOTE Confidence: 0.94939905

00:00:32.770 --> 00:00:33.890 up. So if you wanna  
NOTE Confidence: 0.94939905

00:00:33.890 --> 00:00:35.489 grab something, there is still  
NOTE Confidence: 0.94939905

00:00:35.489 --> 00:00:36.550 food out there.  
NOTE Confidence: 0.8651444

00:00:38.129 --> 00:00:39.890 With that said, I guess,  
NOTE Confidence: 0.8651444

00:00:39.890 --> 00:00:41.329 other things are popular. That  
NOTE Confidence: 0.8651444

00:00:41.329 --> 00:00:42.710 is the reason why everyone  
NOTE Confidence: 0.8651444

00:00:42.850 --> 00:00:43.590 is here.  
NOTE Confidence: 0.8960165

00:00:45.085 --> 00:00:46.625 And this is the first  
NOTE Confidence: 0.8960165

00:00:46.765 --> 00:00:47.745 YBIC seminar,  
NOTE Confidence: 0.96264213

00:00:48.925 --> 00:00:50.684 and we recently people have  
NOTE Confidence: 0.96264213

00:00:50.684 --> 00:00:52.284 been, asking us what is  
NOTE Confidence: 0.96264213

00:00:52.284 --> 00:00:53.565 this place. So this is  
NOTE Confidence: 0.96264213

00:00:53.565 --> 00:00:55.345 basically the Department of Biomedical  
NOTE Confidence: 0.96264213

00:00:55.405 --> 00:00:57.245 Informatics and Data Science. We  
NOTE Confidence: 0.96264213

00:00:57.245 --> 00:00:58.285 just moved here a few

NOTE Confidence: 0.96264213  
00:00:58.285 --> 00:00:59.100 weeks back,  
NOTE Confidence: 0.93160796  
00:01:00.059 --> 00:01:02.300 from hundred college ninth floor  
NOTE Confidence: 0.93160796  
00:01:02.300 --> 00:01:03.760 to hundred and one college  
NOTE Confidence: 0.93160796  
00:01:03.820 --> 00:01:04.640 tenth floor.  
NOTE Confidence: 0.95837086  
00:01:05.659 --> 00:01:06.780 And, yeah, as I said,  
NOTE Confidence: 0.95837086  
00:01:06.780 --> 00:01:07.900 this is the first five  
NOTE Confidence: 0.95837086  
00:01:07.900 --> 00:01:09.259 week. It's a seminar series,  
NOTE Confidence: 0.95837086  
00:01:09.259 --> 00:01:10.220 and this is the first  
NOTE Confidence: 0.95837086  
00:01:10.220 --> 00:01:12.345 one. On May twenty ninth,  
NOTE Confidence: 0.95837086  
00:01:12.665 --> 00:01:14.025 morning, we are gonna have  
NOTE Confidence: 0.95837086  
00:01:14.025 --> 00:01:15.305 another one that is gonna  
NOTE Confidence: 0.95837086  
00:01:15.305 --> 00:01:16.525 be on market scan.  
NOTE Confidence: 0.98860854  
00:01:17.545 --> 00:01:19.645 So thanks again, for joining.  
NOTE Confidence: 0.99305624  
00:01:21.225 --> 00:01:22.665 I hope we meet your  
NOTE Confidence: 0.99305624  
00:01:22.665 --> 00:01:23.165 expectations  
NOTE Confidence: 0.9537199

00:01:23.545 --> 00:01:24.505 and you have a great  
NOTE Confidence: 0.9537199

00:01:24.505 --> 00:01:25.245 time learning.  
NOTE Confidence: 0.911351

00:01:25.785 --> 00:01:27.225 I would first welcome doctor  
NOTE Confidence: 0.911351

00:01:27.225 --> 00:01:27.725 Korsho,  
NOTE Confidence: 0.9605055

00:01:28.380 --> 00:01:29.900 to give a brief introduction  
NOTE Confidence: 0.9605055

00:01:29.900 --> 00:01:31.500 of what YVIX stands for  
NOTE Confidence: 0.9605055

00:01:31.500 --> 00:01:32.459 and what it is all  
NOTE Confidence: 0.9605055

00:01:32.459 --> 00:01:32.959 about.  
NOTE Confidence: 0.8413071

00:01:34.540 --> 00:01:36.780 So, thanks. Vipina, you should  
NOTE Confidence: 0.8413071

00:01:36.780 --> 00:01:37.920 introduce yourself.  
NOTE Confidence: 0.90791255

00:01:38.780 --> 00:01:40.480 Yeah. I So thanks, Vipina,  
NOTE Confidence: 0.90791255

00:01:40.540 --> 00:01:41.819 Sue, and all others for  
NOTE Confidence: 0.90791255

00:01:41.819 --> 00:01:43.845 the, organization of these events.  
NOTE Confidence: 0.90791255

00:01:44.084 --> 00:01:44.584 Yeah.  
NOTE Confidence: 0.7165439

00:01:46.005 --> 00:01:46.505 Oh,  
NOTE Confidence: 0.94594014

00:01:47.125 --> 00:01:48.665 I'll just go ahead to

NOTE Confidence: 0.99647176  
00:01:49.765 --> 00:01:50.265 so  
NOTE Confidence: 0.9727132  
00:01:51.125 --> 00:01:52.425 oh, does it move?  
NOTE Confidence: 0.86129624  
00:01:58.170 --> 00:01:59.770 I guess most of you  
NOTE Confidence: 0.86129624  
00:01:59.850 --> 00:02:01.210 first time being this building.  
NOTE Confidence: 0.86129624  
00:02:01.210 --> 00:02:01.710 Right?  
NOTE Confidence: 0.9745306  
00:02:02.810 --> 00:02:03.310 Okay.  
NOTE Confidence: 0.9151991  
00:02:05.450 --> 00:02:06.810 So we actually moved here  
NOTE Confidence: 0.9151991  
00:02:06.810 --> 00:02:08.110 two weeks ago, like said,  
NOTE Confidence: 0.9151991  
00:02:08.330 --> 00:02:08.570 and,  
NOTE Confidence: 0.8898873  
00:02:10.745 --> 00:02:12.105 we are at, my name  
NOTE Confidence: 0.8898873  
00:02:12.105 --> 00:02:13.704 is Washu. I'm a professor  
NOTE Confidence: 0.8898873  
00:02:13.704 --> 00:02:14.905 vice chair for research at  
NOTE Confidence: 0.8898873  
00:02:14.905 --> 00:02:16.525 the department of biomedical informatics  
NOTE Confidence: 0.8898873  
00:02:16.584 --> 00:02:17.484 and data science.  
NOTE Confidence: 0.8998693  
00:02:18.344 --> 00:02:20.204 Today, this workshop is organized  
NOTE Confidence: 0.8998693

00:02:20.344 --> 00:02:22.344 actually by, a office called  
NOTE Confidence: 0.8998693

00:02:22.344 --> 00:02:22.844 YBIC,  
NOTE Confidence: 0.909526

00:02:23.224 --> 00:02:25.165 Yale Biomedical Informatics and Computing.  
NOTE Confidence: 0.99576545

00:02:26.000 --> 00:02:27.280 It's led by doctor,  
NOTE Confidence: 0.83075464

00:02:27.680 --> 00:02:29.919 Lucila Ono Machado, deputy dean,  
NOTE Confidence: 0.9594167

00:02:30.240 --> 00:02:31.760 for biomedical informatics at the  
NOTE Confidence: 0.9594167

00:02:31.760 --> 00:02:32.900 Yale School of Medicine.  
NOTE Confidence: 0.95554036

00:02:33.600 --> 00:02:35.120 And, I don't know how  
NOTE Confidence: 0.95554036

00:02:35.120 --> 00:02:36.560 many of you have actually  
NOTE Confidence: 0.95554036

00:02:36.560 --> 00:02:38.400 accessed the YBIC website. Can  
NOTE Confidence: 0.95554036

00:02:38.400 --> 00:02:39.760 you show me your hands  
NOTE Confidence: 0.95554036

00:02:39.760 --> 00:02:40.260 if  
NOTE Confidence: 0.9681254

00:02:40.735 --> 00:02:42.415 very few? So it's good  
NOTE Confidence: 0.9681254

00:02:42.415 --> 00:02:43.855 opportunity for me to promote  
NOTE Confidence: 0.9681254

00:02:43.855 --> 00:02:44.355 this.  
NOTE Confidence: 0.9362711

00:02:44.815 --> 00:02:46.655 So the the reason too

NOTE Confidence: 0.9362711  
00:02:46.655 --> 00:02:48.815 is that Xi YBIC is  
NOTE Confidence: 0.9362711  
00:02:48.815 --> 00:02:50.014 really trying to make a  
NOTE Confidence: 0.9362711  
00:02:50.014 --> 00:02:51.715 central hub for folks,  
NOTE Confidence: 0.80394447  
00:02:53.375 --> 00:02:55.235 looking for biomedical datasets,  
NOTE Confidence: 0.95769376  
00:02:55.690 --> 00:02:56.730 or you are looking for  
NOTE Confidence: 0.95769376  
00:02:56.730 --> 00:02:58.650 software tools to conduct a,  
NOTE Confidence: 0.95769376  
00:02:58.970 --> 00:02:59.950 clinical research.  
NOTE Confidence: 0.97191083  
00:03:00.490 --> 00:03:02.410 Also, maybe also, for a  
NOTE Confidence: 0.97191083  
00:03:02.410 --> 00:03:03.770 lot of medical AI stuff,  
NOTE Confidence: 0.97191083  
00:03:03.770 --> 00:03:04.810 you are looking for more  
NOTE Confidence: 0.97191083  
00:03:04.810 --> 00:03:07.130 secure computing environment, right, to  
NOTE Confidence: 0.97191083  
00:03:07.130 --> 00:03:08.270 run the models.  
NOTE Confidence: 0.988631  
00:03:08.765 --> 00:03:09.805 And we're also trying to  
NOTE Confidence: 0.988631  
00:03:09.805 --> 00:03:10.925 provide training. And if you  
NOTE Confidence: 0.988631  
00:03:10.925 --> 00:03:11.965 go to the website, you  
NOTE Confidence: 0.988631

00:03:11.965 --> 00:03:13.245 actually find a lot of  
NOTE Confidence: 0.988631  
00:03:13.245 --> 00:03:13.745 information.  
NOTE Confidence: 0.9370436  
00:03:14.365 --> 00:03:16.285 And YBIC is really a  
NOTE Confidence: 0.9370436  
00:03:16.285 --> 00:03:16.785 collaboration  
NOTE Confidence: 0.97071457  
00:03:17.565 --> 00:03:19.185 among a number of different  
NOTE Confidence: 0.97071457  
00:03:19.325 --> 00:03:19.825 entities,  
NOTE Confidence: 0.8758028  
00:03:20.365 --> 00:03:22.065 partnership with the YNH,  
NOTE Confidence: 0.80148554  
00:03:22.950 --> 00:03:23.610 the hospital,  
NOTE Confidence: 0.7293298  
00:03:25.270 --> 00:03:26.330 analytic team,  
NOTE Confidence: 0.92544824  
00:03:26.710 --> 00:03:27.530 also with,  
NOTE Confidence: 0.9004066  
00:03:27.990 --> 00:03:28.490 YCRC.  
NOTE Confidence: 0.9298969  
00:03:28.790 --> 00:03:30.150 Many of you know, probably  
NOTE Confidence: 0.9298969  
00:03:30.150 --> 00:03:30.810 the Yale,  
NOTE Confidence: 0.9235054  
00:03:31.669 --> 00:03:33.130 Center for Research Computing,  
NOTE Confidence: 0.864106  
00:03:34.389 --> 00:03:35.690 health science ITS,  
NOTE Confidence: 0.9667288  
00:03:36.685 --> 00:03:38.385 team. So we work together



NOTE Confidence: 0.9667288

00:03:38.444 --> 00:03:40.364 really trying to, provide all

NOTE Confidence: 0.9667288

00:03:40.364 --> 00:03:41.645 the resource to to the

NOTE Confidence: 0.9667288

00:03:41.645 --> 00:03:43.105 folks who are working on,

NOTE Confidence: 0.82157487

00:03:44.125 --> 00:03:46.785 biomedical informatics, clinical research, requires

NOTE Confidence: 0.82157487

00:03:46.925 --> 00:03:47.425 heavy,

NOTE Confidence: 0.71348435

00:03:48.045 --> 00:03:48.545 computational

NOTE Confidence: 0.96342504

00:03:49.005 --> 00:03:50.525 resource, for example, things like

NOTE Confidence: 0.96342504

00:03:50.525 --> 00:03:51.600 that. And right now, we

NOTE Confidence: 0.96342504

00:03:51.600 --> 00:03:53.200 actually have three different office

NOTE Confidence: 0.96342504

00:03:53.200 --> 00:03:53.866 under doctor,

NOTE Confidence: 0.9502767

00:03:54.560 --> 00:03:56.480 Ona Machado. One is the,

NOTE Confidence: 0.9502767

00:03:56.800 --> 00:03:58.820 strategic initiative. It's led

NOTE Confidence: 0.80780864

00:03:59.200 --> 00:04:01.280 by herself and more on

NOTE Confidence: 0.80780864

00:04:01.280 --> 00:04:02.820 the initiatives on the

NOTE Confidence: 0.98283213

00:04:03.285 --> 00:04:05.365 strategic planning. And the second

NOTE Confidence: 0.98283213

00:04:05.365 --> 00:04:06.485 one is led by doctor  
NOTE Confidence: 0.98283213

00:04:06.485 --> 00:04:06.985 Danny,  
NOTE Confidence: 0.9229262

00:04:07.605 --> 00:04:09.285 Daniela Meeker in the middle.  
NOTE Confidence: 0.9229262

00:04:09.285 --> 00:04:10.325 I think many of you  
NOTE Confidence: 0.9229262

00:04:10.325 --> 00:04:12.265 probably already use the research  
NOTE Confidence: 0.9229262

00:04:12.405 --> 00:04:13.625 informatics office,  
NOTE Confidence: 0.9492479

00:04:14.325 --> 00:04:15.525 like JEDA team to help  
NOTE Confidence: 0.9492479

00:04:15.525 --> 00:04:17.659 you retrieve data from the  
NOTE Confidence: 0.9492479

00:04:17.659 --> 00:04:19.419 the hospital EHR system. I  
NOTE Confidence: 0.9492479

00:04:19.419 --> 00:04:20.939 think probably many of you  
NOTE Confidence: 0.9492479

00:04:20.939 --> 00:04:22.379 have used the service. Right?  
NOTE Confidence: 0.9492479

00:04:22.379 --> 00:04:23.419 Can you raise your hand  
NOTE Confidence: 0.9492479

00:04:23.419 --> 00:04:24.300 if you have a  
NOTE Confidence: 0.9832246

00:04:25.099 --> 00:04:26.539 we have a JEDI team  
NOTE Confidence: 0.9832246

00:04:26.539 --> 00:04:26.939 lead,  
NOTE Confidence: 0.95707697

00:04:27.419 --> 00:04:28.779 Richard here. So if you

NOTE Confidence: 0.95707697  
00:04:28.779 --> 00:04:29.900 have more question, you can  
NOTE Confidence: 0.95707697  
00:04:29.900 --> 00:04:31.725 also ask him. And then,  
NOTE Confidence: 0.95707697  
00:04:31.964 --> 00:04:33.165 the third one is called  
NOTE Confidence: 0.95707697  
00:04:33.165 --> 00:04:35.185 the, research computing infrastructure.  
NOTE Confidence: 0.8853962  
00:04:35.565 --> 00:04:36.925 It's called it by myself  
NOTE Confidence: 0.8853962  
00:04:36.925 --> 00:04:37.165 and,  
NOTE Confidence: 0.6616565  
00:04:38.125 --> 00:04:38.625 doctor,  
NOTE Confidence: 0.87875307  
00:04:39.085 --> 00:04:39.585 Weiss.  
NOTE Confidence: 0.9995272  
00:04:40.365 --> 00:04:40.865 So  
NOTE Confidence: 0.9926059  
00:04:41.245 --> 00:04:42.685 this one is really trying  
NOTE Confidence: 0.9926059  
00:04:42.685 --> 00:04:43.185 to,  
NOTE Confidence: 0.9994814  
00:04:43.645 --> 00:04:44.145 provide  
NOTE Confidence: 0.90835625  
00:04:45.919 --> 00:04:47.860 all the secure computing environment,  
NOTE Confidence: 0.90835625  
00:04:48.000 --> 00:04:48.960 which I think many of  
NOTE Confidence: 0.90835625  
00:04:48.960 --> 00:04:50.240 you actually might be interested  
NOTE Confidence: 0.90835625

00:04:50.240 --> 00:04:51.600 because now when we actually  
NOTE Confidence: 0.90835625

00:04:51.600 --> 00:04:53.199 develop medical AI, large amount  
NOTE Confidence: 0.90835625

00:04:53.199 --> 00:04:54.400 of model, we're often looking  
NOTE Confidence: 0.90835625

00:04:54.400 --> 00:04:54.900 for,  
NOTE Confidence: 0.83755004

00:04:56.639 --> 00:04:58.720 GPU resources. And you probably  
NOTE Confidence: 0.83755004

00:04:58.720 --> 00:04:59.360 heard about,  
NOTE Confidence: 0.9559181

00:04:59.760 --> 00:05:01.620 recent investment from Yale,  
NOTE Confidence: 0.81282794

00:05:02.235 --> 00:05:03.995 fifty million on hardware as  
NOTE Confidence: 0.81282794

00:05:03.995 --> 00:05:04.654 on GPUs  
NOTE Confidence: 0.98840046

00:05:05.115 --> 00:05:06.095 to facilitate  
NOTE Confidence: 0.9953258

00:05:06.395 --> 00:05:07.055 AI research.  
NOTE Confidence: 0.95075977

00:05:07.355 --> 00:05:09.435 And in, specifically, what we  
NOTE Confidence: 0.95075977

00:05:09.435 --> 00:05:10.555 are working on is trying  
NOTE Confidence: 0.95075977

00:05:10.555 --> 00:05:11.995 to provide more kind of  
NOTE Confidence: 0.95075977

00:05:11.995 --> 00:05:13.615 secure computing environment.  
NOTE Confidence: 0.7437565

00:05:13.939 --> 00:05:15.060 Because we are may working

NOTE Confidence: 0.7437565  
00:05:15.060 --> 00:05:16.439 on the kingly patient  
NOTE Confidence: 0.98718846  
00:05:16.819 --> 00:05:18.339 data with PHIs, how we  
NOTE Confidence: 0.98718846  
00:05:18.339 --> 00:05:20.020 can protect those information while  
NOTE Confidence: 0.98718846  
00:05:20.020 --> 00:05:21.240 we do medical research.  
NOTE Confidence: 0.986616  
00:05:21.620 --> 00:05:23.300 So right now, our office  
NOTE Confidence: 0.986616  
00:05:23.300 --> 00:05:24.659 has been kind of working  
NOTE Confidence: 0.986616  
00:05:24.659 --> 00:05:26.199 on four different platforms.  
NOTE Confidence: 0.94526833  
00:05:26.595 --> 00:05:27.875 Some of you may heard  
NOTE Confidence: 0.94526833  
00:05:27.875 --> 00:05:29.175 of some of the platforms.  
NOTE Confidence: 0.94526833  
00:05:29.235 --> 00:05:30.595 Some of them actually is  
NOTE Confidence: 0.94526833  
00:05:30.595 --> 00:05:32.115 still coming. So the first  
NOTE Confidence: 0.94526833  
00:05:32.115 --> 00:05:34.115 one, I think, today, we're  
NOTE Confidence: 0.94526833  
00:05:34.115 --> 00:05:35.315 also gonna talk about is,  
NOTE Confidence: 0.94526833  
00:05:35.315 --> 00:05:37.315 like, the VDI environment so  
NOTE Confidence: 0.94526833  
00:05:37.315 --> 00:05:38.675 you can remote access to  
NOTE Confidence: 0.94526833

00:05:38.675 --> 00:05:40.455 the environment within the hospital  
NOTE Confidence: 0.97992116

00:05:40.830 --> 00:05:41.870 through a kind of remote  
NOTE Confidence: 0.97992116

00:05:41.870 --> 00:05:44.270 desktop kind of, environment. Second  
NOTE Confidence: 0.97992116

00:05:44.270 --> 00:05:44.770 one,  
NOTE Confidence: 0.9832208

00:05:45.230 --> 00:05:46.589 is also a focus of  
NOTE Confidence: 0.9832208

00:05:46.589 --> 00:05:47.089 today's,  
NOTE Confidence: 0.93029517

00:05:47.630 --> 00:05:48.990 a lot of presentation is  
NOTE Confidence: 0.93029517

00:05:48.990 --> 00:05:49.729 the CHG,  
NOTE Confidence: 0.8060559

00:05:50.669 --> 00:05:51.490 safe environment  
NOTE Confidence: 0.964066

00:05:51.790 --> 00:05:53.070 with a lot of CPUs  
NOTE Confidence: 0.964066

00:05:53.070 --> 00:05:54.750 and GPU within the hospital  
NOTE Confidence: 0.964066

00:05:54.750 --> 00:05:56.205 in a HIPAA compliance  
NOTE Confidence: 0.91089565

00:05:56.825 --> 00:05:58.505 environment. And the third one  
NOTE Confidence: 0.91089565

00:05:58.505 --> 00:06:00.105 is, what we are building.  
NOTE Confidence: 0.91089565

00:06:00.105 --> 00:06:01.705 You probably heard about spin  
NOTE Confidence: 0.91089565

00:06:01.705 --> 00:06:03.005 up, which is the AWS

NOTE Confidence: 0.93788964  
00:06:03.545 --> 00:06:04.445 kind of self-service,  
NOTE Confidence: 0.9384937  
00:06:05.305 --> 00:06:07.385 environment. Now we're actually making  
NOTE Confidence: 0.9384937  
00:06:07.385 --> 00:06:08.825 this, for the spin up  
NOTE Confidence: 0.9384937  
00:06:08.825 --> 00:06:10.339 plus. What we are doing,  
NOTE Confidence: 0.9384937  
00:06:10.339 --> 00:06:12.039 trying to make it, NIST  
NOTE Confidence: 0.9384937  
00:06:12.099 --> 00:06:13.800 eight hundred one seventy one  
NOTE Confidence: 0.9384937  
00:06:14.099 --> 00:06:14.599 environment.  
NOTE Confidence: 0.9813452  
00:06:15.460 --> 00:06:17.300 So, over there, you can,  
NOTE Confidence: 0.9813452  
00:06:17.539 --> 00:06:18.039 safely  
NOTE Confidence: 0.89933443  
00:06:18.500 --> 00:06:20.360 manage all the PHI data.  
NOTE Confidence: 0.89933443  
00:06:20.659 --> 00:06:22.580 Under the fourth one, it's  
NOTE Confidence: 0.89933443  
00:06:22.580 --> 00:06:23.479 named hopper.  
NOTE Confidence: 0.9958463  
00:06:24.104 --> 00:06:25.724 So it's a more secure  
NOTE Confidence: 0.92211056  
00:06:26.185 --> 00:06:28.025 computing GPU class that will  
NOTE Confidence: 0.92211056  
00:06:28.025 --> 00:06:29.944 be available in July this  
NOTE Confidence: 0.92211056

00:06:29.944 --> 00:06:31.944 year. So far, Hopper already  
NOTE Confidence: 0.92211056

00:06:31.944 --> 00:06:32.264 have,  
NOTE Confidence: 0.929222

00:06:33.224 --> 00:06:35.785 installed about sixty NVIDIA h  
NOTE Confidence: 0.929222

00:06:35.785 --> 00:06:37.224 one hundred, and it's in  
NOTE Confidence: 0.929222

00:06:37.224 --> 00:06:38.525 better testing environment.  
NOTE Confidence: 0.95226544

00:06:38.930 --> 00:06:40.210 The the data center is  
NOTE Confidence: 0.95226544

00:06:40.210 --> 00:06:41.589 hosted in the Massachusetts,  
NOTE Confidence: 0.9481565

00:06:42.370 --> 00:06:43.970 data center, but it will  
NOTE Confidence: 0.9481565

00:06:43.970 --> 00:06:45.170 be managed by a team  
NOTE Confidence: 0.9481565

00:06:45.170 --> 00:06:46.930 at the end. So I  
NOTE Confidence: 0.9481565

00:06:46.930 --> 00:06:48.130 just have a call out  
NOTE Confidence: 0.9481565

00:06:48.130 --> 00:06:49.410 for this platform. It will  
NOTE Confidence: 0.9481565

00:06:49.410 --> 00:06:50.610 come in soon if you're  
NOTE Confidence: 0.9481565

00:06:50.610 --> 00:06:51.750 looking for more GPU,  
NOTE Confidence: 0.9909317

00:06:52.450 --> 00:06:52.950 resources.  
NOTE Confidence: 0.9686929

00:06:53.775 --> 00:06:55.375 So for today's, a lot



NOTE Confidence: 0.9686929

00:06:55.375 --> 00:06:56.975 of presentation, actually, we are

NOTE Confidence: 0.9686929

00:06:56.975 --> 00:06:58.255 focusing on the first two,

NOTE Confidence: 0.9686929

00:06:58.255 --> 00:06:59.555 which is on the VDI,

NOTE Confidence: 0.9130357

00:07:00.335 --> 00:07:02.095 CHP safe environment, which is

NOTE Confidence: 0.9130357

00:07:02.095 --> 00:07:03.795 sitting in the hospital environment.

NOTE Confidence: 0.8866787

00:07:04.175 --> 00:07:05.154 And the idea

NOTE Confidence: 0.92720044

00:07:05.640 --> 00:07:07.560 is really trying to answer

NOTE Confidence: 0.92720044

00:07:07.560 --> 00:07:09.320 all your questions like, how

NOTE Confidence: 0.92720044

00:07:09.320 --> 00:07:10.940 can we access the data?

NOTE Confidence: 0.9698067

00:07:11.400 --> 00:07:13.080 How can we request the

NOTE Confidence: 0.9698067

00:07:13.080 --> 00:07:15.640 computational resource within the CHP

NOTE Confidence: 0.9698067

00:07:15.640 --> 00:07:16.760 safe? For example, on the

NOTE Confidence: 0.9698067

00:07:16.760 --> 00:07:18.200 CHP safe, you can also

NOTE Confidence: 0.9698067

00:07:18.200 --> 00:07:19.500 see we have some GPUs

NOTE Confidence: 0.9698067

00:07:19.560 --> 00:07:20.520 like a one hundred, h

NOTE Confidence: 0.9698067

00:07:20.520 --> 00:07:21.824 one hundred as well. How  
NOTE Confidence: 0.9698067

00:07:21.824 --> 00:07:23.264 can you request it? And  
NOTE Confidence: 0.9698067

00:07:23.264 --> 00:07:24.785 then the second half is  
NOTE Confidence: 0.9698067

00:07:24.785 --> 00:07:25.265 really,  
NOTE Confidence: 0.90468085

00:07:26.384 --> 00:07:28.324 about building large engine model.  
NOTE Confidence: 0.90468085

00:07:28.384 --> 00:07:30.705 Like, under CHP safe, we  
NOTE Confidence: 0.90468085

00:07:30.705 --> 00:07:32.785 have developed some available tools,  
NOTE Confidence: 0.90468085

00:07:32.785 --> 00:07:33.285 APIs.  
NOTE Confidence: 0.985176

00:07:33.745 --> 00:07:34.625 So we show you how  
NOTE Confidence: 0.985176

00:07:34.625 --> 00:07:35.985 you can call to use  
NOTE Confidence: 0.985176

00:07:35.985 --> 00:07:36.724 those tools  
NOTE Confidence: 0.9902369

00:07:37.030 --> 00:07:38.729 to to for different clinical,  
NOTE Confidence: 0.9993758

00:07:39.270 --> 00:07:39.770 applications.  
NOTE Confidence: 0.93284607

00:07:40.949 --> 00:07:41.990 I'll stop here. I'll let  
NOTE Confidence: 0.93284607

00:07:41.990 --> 00:07:43.850 the, Vipina just to introduce  
NOTE Confidence: 0.93284607

00:07:44.070 --> 00:07:45.190 the agenda and the way

NOTE Confidence: 0.93284607  
00:07:45.190 --> 00:07:46.389 we go from there. Thanks,  
NOTE Confidence: 0.93284607  
00:07:46.389 --> 00:07:46.889 everyone.  
NOTE Confidence: 0.9692077  
00:07:53.775 --> 00:07:55.075 This is how we have  
NOTE Confidence: 0.9692077  
00:07:55.135 --> 00:07:56.835 structured today's presentation,  
NOTE Confidence: 0.9705605  
00:07:57.295 --> 00:07:58.735 session one from one to  
NOTE Confidence: 0.9705605  
00:07:58.735 --> 00:08:00.575 two thirty. We'll have a  
NOTE Confidence: 0.9705605  
00:08:00.575 --> 00:08:01.935 coffee break from two thirty  
NOTE Confidence: 0.9705605  
00:08:01.935 --> 00:08:03.215 to two forty five. I've  
NOTE Confidence: 0.9705605  
00:08:03.215 --> 00:08:05.235 already started getting coffee. Yes.  
NOTE Confidence: 0.9705605  
00:08:05.375 --> 00:08:06.255 And from session,  
NOTE Confidence: 0.97187126  
00:08:06.870 --> 00:08:08.150 two from two forty five  
NOTE Confidence: 0.97187126  
00:08:08.150 --> 00:08:09.510 to four, and followed by  
NOTE Confidence: 0.97187126  
00:08:09.510 --> 00:08:10.970 that, we'll have a networking  
NOTE Confidence: 0.97187126  
00:08:11.190 --> 00:08:12.790 reception in our kitchen right  
NOTE Confidence: 0.97187126  
00:08:12.790 --> 00:08:13.290 there.  
NOTE Confidence: 0.8766035

00:08:14.950 --> 00:08:15.450 So  
NOTE Confidence: 0.98949736  
00:08:15.910 --> 00:08:17.270 for session one, this is  
NOTE Confidence: 0.98949736  
00:08:17.270 --> 00:08:18.570 what we are gonna do.  
NOTE Confidence: 0.9025839  
00:08:19.430 --> 00:08:21.305 Rich is gonna talk about  
NOTE Confidence: 0.9025839  
00:08:21.445 --> 00:08:23.125 research data or JED at  
NOTE Confidence: 0.9025839  
00:08:23.125 --> 00:08:24.645 what, where, how, these things.  
NOTE Confidence: 0.9025839  
00:08:24.645 --> 00:08:25.845 And again, as doctor Shu  
NOTE Confidence: 0.9025839  
00:08:25.845 --> 00:08:27.605 mentioned, we will dive deep  
NOTE Confidence: 0.9025839  
00:08:27.605 --> 00:08:29.525 into chip safe environment and  
NOTE Confidence: 0.9025839  
00:08:29.525 --> 00:08:30.505 what is Camino,  
NOTE Confidence: 0.9552345  
00:08:30.965 --> 00:08:32.965 the presentations by Nate and  
NOTE Confidence: 0.9552345  
00:08:32.965 --> 00:08:33.465 AI,  
NOTE Confidence: 0.9352957  
00:08:33.929 --> 00:08:35.210 and then doctor Shu will  
NOTE Confidence: 0.9352957  
00:08:35.210 --> 00:08:36.890 do a a overview of  
NOTE Confidence: 0.9352957  
00:08:36.890 --> 00:08:38.270 large language models.  
NOTE Confidence: 0.9984972  
00:08:39.850 --> 00:08:41.550 And after the coffee break,

NOTE Confidence: 0.9614119  
00:08:43.050 --> 00:08:44.830 YuJa is gonna show you  
NOTE Confidence: 0.9614119  
00:08:45.050 --> 00:08:46.490 why we do annotation, some  
NOTE Confidence: 0.9614119  
00:08:46.490 --> 00:08:47.850 of the annotation tools that  
NOTE Confidence: 0.9614119  
00:08:47.850 --> 00:08:48.650 we have set up on  
NOTE Confidence: 0.9614119  
00:08:48.650 --> 00:08:49.390 this environment.  
NOTE Confidence: 0.98326606  
00:08:49.995 --> 00:08:51.434 And then I'll go deeply  
NOTE Confidence: 0.98326606  
00:08:51.434 --> 00:08:52.875 into one of the clinical  
NOTE Confidence: 0.98326606  
00:08:52.875 --> 00:08:55.115 information extraction pipelines that we  
NOTE Confidence: 0.98326606  
00:08:55.115 --> 00:08:56.015 have built.  
NOTE Confidence: 0.9816586  
00:08:56.875 --> 00:08:58.475 And then Vincent is gonna  
NOTE Confidence: 0.9816586  
00:08:58.475 --> 00:08:59.995 do a short demo on  
NOTE Confidence: 0.9816586  
00:08:59.995 --> 00:09:01.675 Kiwi as an API services.  
NOTE Confidence: 0.9816586  
00:09:01.675 --> 00:09:03.434 We'll discuss those things. And  
NOTE Confidence: 0.9816586  
00:09:03.434 --> 00:09:03.934 finally,  
NOTE Confidence: 0.9986624  
00:09:04.429 --> 00:09:06.050 a bit of programming  
NOTE Confidence: 0.8264327

00:09:06.509 --> 00:09:07.410 intense session,  
NOTE Confidence: 0.94415265

00:09:08.029 --> 00:09:09.149 that is will be done  
NOTE Confidence: 0.94415265

00:09:09.149 --> 00:09:10.750 by Lingfei where we'll tell  
NOTE Confidence: 0.94415265

00:09:10.750 --> 00:09:12.209 you how to develop customized  
NOTE Confidence: 0.94415265

00:09:12.350 --> 00:09:14.209 LLMs for your specific task.  
NOTE Confidence: 0.97838026

00:09:17.915 --> 00:09:19.115 We will have a q  
NOTE Confidence: 0.97838026

00:09:19.115 --> 00:09:20.815 and a session after each  
NOTE Confidence: 0.97838026

00:09:20.875 --> 00:09:22.635 speaker presence, so please hold  
NOTE Confidence: 0.97838026

00:09:22.635 --> 00:09:24.155 your questions till that so  
NOTE Confidence: 0.97838026

00:09:24.155 --> 00:09:25.375 that we are on time.  
NOTE Confidence: 0.9632568

00:09:26.155 --> 00:09:27.215 I'd like to welcome  
NOTE Confidence: 0.8394198

00:09:27.675 --> 00:09:30.575 now Rich Hintz, director clinical  
NOTE Confidence: 0.8394198

00:09:30.635 --> 00:09:31.135 research  
NOTE Confidence: 0.99944586

00:09:31.950 --> 00:09:32.450 data  
NOTE Confidence: 0.9135545

00:09:32.990 --> 00:09:34.770 services. Rich, please take over.  
NOTE Confidence: 0.781108

00:09:46.065 --> 00:09:46.804 Good afternoon.

NOTE Confidence: 0.87191564  
00:09:49.505 --> 00:09:50.804 Flip this over a bit.  
NOTE Confidence: 0.9825823  
00:09:55.184 --> 00:09:56.625 Alright. Thanks for having me,  
NOTE Confidence: 0.9825823  
00:09:56.625 --> 00:09:57.125 everyone.  
NOTE Confidence: 0.9080555  
00:09:57.825 --> 00:09:59.025 I'm Richard. I'm part of  
NOTE Confidence: 0.9080555  
00:09:59.025 --> 00:09:59.525 the  
NOTE Confidence: 0.97259504  
00:10:00.440 --> 00:10:02.120 research informatics office, and I'm  
NOTE Confidence: 0.97259504  
00:10:02.120 --> 00:10:03.500 glad to be here today.  
NOTE Confidence: 0.97259504  
00:10:03.800 --> 00:10:05.160 And, to tell you a  
NOTE Confidence: 0.97259504  
00:10:05.160 --> 00:10:06.120 little bit I wanna give  
NOTE Confidence: 0.97259504  
00:10:06.120 --> 00:10:07.000 you a little background about  
NOTE Confidence: 0.97259504  
00:10:07.000 --> 00:10:08.200 our group. We're a team  
NOTE Confidence: 0.97259504  
00:10:08.200 --> 00:10:09.800 of eleven. We support Yale  
NOTE Confidence: 0.97259504  
00:10:09.800 --> 00:10:11.100 faculty, staff, residents,  
NOTE Confidence: 0.8232243  
00:10:11.960 --> 00:10:12.460 hospital,  
NOTE Confidence: 0.97028166  
00:10:13.955 --> 00:10:15.875 employees, as well as medical  
NOTE Confidence: 0.97028166

00:10:15.875 --> 00:10:16.375 students.  
NOTE Confidence: 0.9003496

00:10:18.275 --> 00:10:19.415 We are primarily  
NOTE Confidence: 0.9160882

00:10:20.035 --> 00:10:21.555 tasked with providing data for  
NOTE Confidence: 0.9160882

00:10:21.555 --> 00:10:23.315 research and research data needs  
NOTE Confidence: 0.9160882

00:10:23.315 --> 00:10:24.515 and includes providing  
NOTE Confidence: 0.6502718

00:10:25.515 --> 00:10:26.015 Ah,  
NOTE Confidence: 0.99147695

00:10:26.515 --> 00:10:27.815 thank you. Alright.  
NOTE Confidence: 0.97743183

00:10:28.589 --> 00:10:29.470 No one minds if I'm  
NOTE Confidence: 0.97743183

00:10:29.470 --> 00:10:30.990 quiet apparently, but that's fine.  
NOTE Confidence: 0.97743183

00:10:30.990 --> 00:10:31.809 That's fine.  
NOTE Confidence: 0.85059273

00:10:32.269 --> 00:10:32.509 No.  
NOTE Confidence: 0.9777903

00:10:33.470 --> 00:10:35.069 We typically respond to about,  
NOTE Confidence: 0.9777903

00:10:35.389 --> 00:10:36.910 over six hundred data requests  
NOTE Confidence: 0.9777903

00:10:36.910 --> 00:10:37.730 every year,  
NOTE Confidence: 0.9974496

00:10:38.190 --> 00:10:39.790 and, you know, we provide  
NOTE Confidence: 0.9974496

00:10:39.790 --> 00:10:40.290 queries,



NOTE Confidence: 0.97507596  
00:10:40.670 --> 00:10:41.809 custom data extracts.  
NOTE Confidence: 0.8866987  
00:10:42.350 --> 00:10:43.730 We work with Epic Reporting  
NOTE Confidence: 0.96005076  
00:10:44.375 --> 00:10:45.035 and develop,  
NOTE Confidence: 0.9298945  
00:10:45.895 --> 00:10:47.675 assist with, MyChart recruitment.  
NOTE Confidence: 0.96889144  
00:10:48.535 --> 00:10:49.654 So, hopefully, I'll be talking  
NOTE Confidence: 0.96889144  
00:10:49.654 --> 00:10:50.375 about today,  
NOTE Confidence: 0.8826228  
00:10:50.855 --> 00:10:52.455 how to obtain data through  
NOTE Confidence: 0.8826228  
00:10:52.455 --> 00:10:53.975 JDAT, giving a little background  
NOTE Confidence: 0.8826228  
00:10:53.975 --> 00:10:55.415 on that, touching upon some  
NOTE Confidence: 0.8826228  
00:10:55.415 --> 00:10:57.095 of the environments that Hua  
NOTE Confidence: 0.8826228  
00:10:57.095 --> 00:10:57.595 mentioned.  
NOTE Confidence: 0.98203707  
00:10:58.375 --> 00:10:59.415 And then, you know, you'll  
NOTE Confidence: 0.98203707  
00:10:59.415 --> 00:11:00.160 hear a lot of great  
NOTE Confidence: 0.98203707  
00:11:00.160 --> 00:11:01.679 information from Nate and Al  
NOTE Confidence: 0.98203707  
00:11:01.679 --> 00:11:03.460 coming up on the computational  
NOTE Confidence: 0.98203707

00:11:03.520 --> 00:11:04.980 health platform and Camino.  
NOTE Confidence: 0.9969198

00:11:06.160 --> 00:11:07.040 So over the last year,  
NOTE Confidence: 0.9969198

00:11:07.040 --> 00:11:08.340 we've been working to focus  
NOTE Confidence: 0.9969198

00:11:08.400 --> 00:11:08.900 on,  
NOTE Confidence: 0.99022245

00:11:09.440 --> 00:11:10.820 really improving processes  
NOTE Confidence: 0.97938144

00:11:11.440 --> 00:11:12.720 that will put data in  
NOTE Confidence: 0.97938144

00:11:12.720 --> 00:11:13.920 the hands of our research  
NOTE Confidence: 0.97938144

00:11:13.920 --> 00:11:16.214 community faster and easier. And,  
NOTE Confidence: 0.97938144

00:11:16.214 --> 00:11:17.654 primarily, we've been doing that  
NOTE Confidence: 0.97938144

00:11:17.654 --> 00:11:18.454 to focus on some of  
NOTE Confidence: 0.97938144

00:11:18.454 --> 00:11:19.415 this and promote some of  
NOTE Confidence: 0.97938144

00:11:19.415 --> 00:11:20.714 the self-service approaches  
NOTE Confidence: 0.98369265

00:11:21.415 --> 00:11:23.175 as well as, you know,  
NOTE Confidence: 0.98369265

00:11:23.175 --> 00:11:23.995 data provisioning  
NOTE Confidence: 0.79071397

00:11:24.454 --> 00:11:26.054 tools on the the y  
NOTE Confidence: 0.79071397

00:11:26.054 --> 00:11:27.035 n YMHH

NOTE Confidence: 0.99897474

00:11:27.495 --> 00:11:27.995 infrastructure.

NOTE Confidence: 0.9849677

00:11:32.730 --> 00:11:34.809 So the the data that's

NOTE Confidence: 0.9849677

00:11:34.809 --> 00:11:35.309 available,

NOTE Confidence: 0.96218723

00:11:35.690 --> 00:11:37.210 the the clinical data, and

NOTE Confidence: 0.96218723

00:11:37.210 --> 00:11:38.410 the research data, you know,

NOTE Confidence: 0.96218723

00:11:38.410 --> 00:11:39.550 they are very overlapped.

NOTE Confidence: 0.8993518

00:11:40.010 --> 00:11:41.390 It's a it's a large,

NOTE Confidence: 0.9729996

00:11:42.650 --> 00:11:44.350 network of the health system,

NOTE Confidence: 0.9120686

00:11:45.285 --> 00:11:46.265 the Yale University,

NOTE Confidence: 0.9152446

00:11:47.524 --> 00:11:49.205 New England Medical Group spanning

NOTE Confidence: 0.9152446

00:11:49.205 --> 00:11:50.745 all of Connecticut down into

NOTE Confidence: 0.9389024

00:11:51.684 --> 00:11:52.964 New York and up into

NOTE Confidence: 0.9389024

00:11:52.964 --> 00:11:54.485 Rhode Island, touching upon more

NOTE Confidence: 0.9389024

00:11:54.485 --> 00:11:55.365 than a hundred and thirty

NOTE Confidence: 0.9389024

00:11:55.365 --> 00:11:55.865 practices,

NOTE Confidence: 0.7120136

00:11:56.725 --> 00:11:58.105 including the Smile of Cancer  
NOTE Confidence: 0.7120136

00:11:58.165 --> 00:11:59.705 Center, it locations,  
NOTE Confidence: 0.9715246

00:12:00.830 --> 00:12:02.910 all the YNNH hospitals, including  
NOTE Confidence: 0.9715246

00:12:02.910 --> 00:12:04.110 the campuses up in Rhode  
NOTE Confidence: 0.9715246

00:12:04.110 --> 00:12:06.190 Island, also the the Chapel  
NOTE Confidence: 0.9715246

00:12:06.190 --> 00:12:07.730 Street and York Street campuses.  
NOTE Confidence: 0.9384384

00:12:08.190 --> 00:12:09.550 All these are linked together  
NOTE Confidence: 0.9384384

00:12:09.550 --> 00:12:10.450 through the Epic  
NOTE Confidence: 0.9611988

00:12:11.150 --> 00:12:12.830 medical record system, which really  
NOTE Confidence: 0.9611988

00:12:12.830 --> 00:12:14.270 gives us the foundation for  
NOTE Confidence: 0.9611988

00:12:14.270 --> 00:12:15.330 providing the data.  
NOTE Confidence: 0.97254395

00:12:19.815 --> 00:12:20.774 So we feel the data  
NOTE Confidence: 0.97254395

00:12:20.774 --> 00:12:22.695 is very rich. There are  
NOTE Confidence: 0.97254395

00:12:22.695 --> 00:12:24.135 more than four point three  
NOTE Confidence: 0.97254395

00:12:24.135 --> 00:12:25.834 million patient records  
NOTE Confidence: 0.9480622

00:12:26.135 --> 00:12:26.875 in Epic.

NOTE Confidence: 0.93905103  
00:12:27.255 --> 00:12:28.899 The database dates back to  
NOTE Confidence: 0.93905103  
00:12:28.899 --> 00:12:30.899 the implementation of Epic within  
NOTE Confidence: 0.93905103  
00:12:30.899 --> 00:12:32.820 the health system approximately twelve  
NOTE Confidence: 0.93905103  
00:12:32.820 --> 00:12:34.660 years ago. And when it  
NOTE Confidence: 0.93905103  
00:12:34.660 --> 00:12:35.779 went live at all the  
NOTE Confidence: 0.93905103  
00:12:35.779 --> 00:12:37.380 the different locations across the  
NOTE Confidence: 0.93905103  
00:12:37.380 --> 00:12:38.120 health system,  
NOTE Confidence: 0.95690435  
00:12:38.899 --> 00:12:40.020 I've listed a couple of  
NOTE Confidence: 0.95690435  
00:12:40.020 --> 00:12:41.140 things in there. These are  
NOTE Confidence: 0.95690435  
00:12:41.140 --> 00:12:41.800 the the  
NOTE Confidence: 0.9782716  
00:12:42.135 --> 00:12:43.415 the the information. Pretty much  
NOTE Confidence: 0.9782716  
00:12:43.415 --> 00:12:44.695 any data that is tracked  
NOTE Confidence: 0.9782716  
00:12:44.695 --> 00:12:47.015 clinically, we can extract out,  
NOTE Confidence: 0.9782716  
00:12:47.015 --> 00:12:48.715 including all the patient demographics,  
NOTE Confidence: 0.9980739  
00:12:49.095 --> 00:12:50.315 their vitals, comorbidities,  
NOTE Confidence: 0.9892733

00:12:51.335 --> 00:12:52.395 surgical data,  
NOTE Confidence: 0.9819378

00:12:53.255 --> 00:12:54.295 all all the labs. You  
NOTE Confidence: 0.9819378

00:12:54.295 --> 00:12:55.495 know, there's there's a there's  
NOTE Confidence: 0.9819378

00:12:55.495 --> 00:12:56.875 a wealth of data from  
NOTE Confidence: 0.9819378

00:12:57.100 --> 00:12:58.620 newborns and deliveries up through  
NOTE Confidence: 0.9819378

00:12:58.620 --> 00:12:59.920 geriatric care.  
NOTE Confidence: 0.939208

00:13:04.940 --> 00:13:06.220 So the data source is  
NOTE Confidence: 0.939208

00:13:06.300 --> 00:13:07.260 you know, this is kind  
NOTE Confidence: 0.939208

00:13:07.260 --> 00:13:08.160 of where we  
NOTE Confidence: 0.9648266

00:13:08.700 --> 00:13:10.695 where we are, involved is  
NOTE Confidence: 0.9648266

00:13:10.775 --> 00:13:12.455 all the data really starts  
NOTE Confidence: 0.9648266

00:13:12.455 --> 00:13:14.215 from from Epic. Epic, as  
NOTE Confidence: 0.9648266

00:13:14.215 --> 00:13:15.995 you already know, is the  
NOTE Confidence: 0.9648266

00:13:16.135 --> 00:13:16.635 electronic  
NOTE Confidence: 0.9566296

00:13:17.175 --> 00:13:18.695 health care record system. It  
NOTE Confidence: 0.9566296

00:13:18.695 --> 00:13:20.775 is designed for patient patient

NOTE Confidence: 0.9566296  
00:13:20.775 --> 00:13:21.275 care.  
NOTE Confidence: 0.9702591  
00:13:22.375 --> 00:13:23.975 Underneath the hood, however, is  
NOTE Confidence: 0.9702591  
00:13:23.975 --> 00:13:26.680 the chronicles database, and that  
NOTE Confidence: 0.9702591  
00:13:26.680 --> 00:13:29.080 database is designed for very  
NOTE Confidence: 0.9702591  
00:13:29.080 --> 00:13:30.840 quick real time access to  
NOTE Confidence: 0.9702591  
00:13:30.840 --> 00:13:33.320 individual patient records and to  
NOTE Confidence: 0.9702591  
00:13:33.320 --> 00:13:33.820 support,  
NOTE Confidence: 0.9640826  
00:13:34.520 --> 00:13:36.380 you know, physician clinician  
NOTE Confidence: 0.995086  
00:13:36.680 --> 00:13:37.660 training of patients.  
NOTE Confidence: 0.99672157  
00:13:39.175 --> 00:13:41.195 However, though, that database  
NOTE Confidence: 0.99985206  
00:13:41.575 --> 00:13:43.195 is not as efficient  
NOTE Confidence: 0.96730465  
00:13:43.575 --> 00:13:45.575 at doing large scale data  
NOTE Confidence: 0.96730465  
00:13:45.575 --> 00:13:47.115 extracts, reporting across,  
NOTE Confidence: 0.91793203  
00:13:47.975 --> 00:13:49.834 all all historical time or  
NOTE Confidence: 0.998946  
00:13:50.214 --> 00:13:51.815 working on data across large  
NOTE Confidence: 0.998946

00:13:51.815 --> 00:13:52.795 patient cohorts.  
NOTE Confidence: 0.9873379

00:13:53.120 --> 00:13:54.500 So with that, the data,  
NOTE Confidence: 0.7739618

00:13:55.279 --> 00:13:55.940 in Epic  
NOTE Confidence: 0.9767789

00:13:56.720 --> 00:13:58.399 is extracted nightly into the  
NOTE Confidence: 0.9767789

00:13:58.399 --> 00:14:00.320 Clarity platform. Clarity is a  
NOTE Confidence: 0.9767789

00:14:00.320 --> 00:14:02.259 much larger database. It has  
NOTE Confidence: 0.9767789

00:14:02.320 --> 00:14:04.079 nearly everything that's in in  
NOTE Confidence: 0.9767789

00:14:04.079 --> 00:14:05.679 the chronicles. It's structured in  
NOTE Confidence: 0.9767789

00:14:05.679 --> 00:14:07.380 a very similar format,  
NOTE Confidence: 0.9553561

00:14:07.715 --> 00:14:08.934 but it's a SQL database.  
NOTE Confidence: 0.99072725

00:14:09.635 --> 00:14:10.995 Our our team has access  
NOTE Confidence: 0.99072725

00:14:10.995 --> 00:14:12.195 to it, and it allows  
NOTE Confidence: 0.99072725

00:14:12.195 --> 00:14:13.075 for a lot of these  
NOTE Confidence: 0.99072725

00:14:13.075 --> 00:14:13.975 larger reporting  
NOTE Confidence: 0.9951881

00:14:14.595 --> 00:14:16.035 tools. However, it is not  
NOTE Confidence: 0.9951881

00:14:16.035 --> 00:14:17.795 real time. It's a you



NOTE Confidence: 0.9951881  
00:14:17.795 --> 00:14:19.075 know, it's extracted daily. It's  
NOTE Confidence: 0.9951881  
00:14:19.075 --> 00:14:20.380 a day behind. It's also  
NOTE Confidence: 0.9951881  
00:14:20.380 --> 00:14:21.699 a little more complex. There  
NOTE Confidence: 0.9951881  
00:14:21.699 --> 00:14:23.800 are approximately twenty thousand tables,  
NOTE Confidence: 0.9588979  
00:14:24.339 --> 00:14:25.860 in the Clarity database. So  
NOTE Confidence: 0.9588979  
00:14:25.860 --> 00:14:27.220 it it's it's massive, but  
NOTE Confidence: 0.9588979  
00:14:27.220 --> 00:14:28.100 it does contain a lot  
NOTE Confidence: 0.9588979  
00:14:28.100 --> 00:14:29.240 of rich data.  
NOTE Confidence: 0.99557346  
00:14:29.940 --> 00:14:30.980 To solve some of those  
NOTE Confidence: 0.99557346  
00:14:30.980 --> 00:14:32.100 issues with the with the  
NOTE Confidence: 0.99557346  
00:14:32.100 --> 00:14:33.160 speed and the complexity,  
NOTE Confidence: 0.9425539  
00:14:33.745 --> 00:14:35.505 Epic has created their Caboodle  
NOTE Confidence: 0.9425539  
00:14:35.505 --> 00:14:36.245 data model.  
NOTE Confidence: 0.96671456  
00:14:36.545 --> 00:14:38.725 Caboodle has is a smaller,  
NOTE Confidence: 0.96671456  
00:14:38.945 --> 00:14:41.045 more normalized database designed for,  
NOTE Confidence: 0.978545

00:14:42.945 --> 00:14:44.785 more productionized reporting. There's on

NOTE Confidence: 0.978545

00:14:44.785 --> 00:14:45.905 the order of six hundred

NOTE Confidence: 0.978545

00:14:45.905 --> 00:14:46.405 tables.

NOTE Confidence: 0.996668

00:14:46.890 --> 00:14:48.730 Queries run faster, but it

NOTE Confidence: 0.996668

00:14:48.730 --> 00:14:49.870 does contain

NOTE Confidence: 0.94246346

00:14:50.250 --> 00:14:51.770 you know, there not everything

NOTE Confidence: 0.94246346

00:14:51.770 --> 00:14:53.690 is is is necessarily in

NOTE Confidence: 0.94246346

00:14:53.690 --> 00:14:54.190 that,

NOTE Confidence: 0.9993675

00:14:54.650 --> 00:14:55.690 but it is easier to

NOTE Confidence: 0.9993675

00:14:55.690 --> 00:14:56.830 use and faster.

NOTE Confidence: 0.91420794

00:14:58.010 --> 00:14:58.910 Moving on,

NOTE Confidence: 0.88722485

00:14:59.690 --> 00:15:00.490 one of one of the

NOTE Confidence: 0.88722485

00:15:00.490 --> 00:15:02.350 also advantages of Capoodle is

NOTE Confidence: 0.88722485

00:15:02.465 --> 00:15:03.585 we can bring in data

NOTE Confidence: 0.88722485

00:15:03.585 --> 00:15:05.025 from outside of Epic as

NOTE Confidence: 0.88722485

00:15:05.025 --> 00:15:05.525 well.

NOTE Confidence: 0.96937805  
00:15:05.985 --> 00:15:07.185 So that data has been  
NOTE Confidence: 0.96937805  
00:15:07.185 --> 00:15:07.685 expanded,  
NOTE Confidence: 0.9465831  
00:15:08.625 --> 00:15:09.985 as new models are are  
NOTE Confidence: 0.9465831  
00:15:09.985 --> 00:15:10.725 made available  
NOTE Confidence: 0.92563754  
00:15:11.265 --> 00:15:12.785 or new data source. For  
NOTE Confidence: 0.92563754  
00:15:12.785 --> 00:15:13.285 example,  
NOTE Confidence: 0.9538287  
00:15:13.825 --> 00:15:15.185 there's an issue initiative right  
NOTE Confidence: 0.9538287  
00:15:15.185 --> 00:15:15.985 now to bring in the  
NOTE Confidence: 0.9538287  
00:15:15.985 --> 00:15:17.365 data from the tumor registry  
NOTE Confidence: 0.98581094  
00:15:17.900 --> 00:15:20.240 into Caboodle so that the  
NOTE Confidence: 0.9469713  
00:15:21.180 --> 00:15:21.760 really accurate,  
NOTE Confidence: 0.9733634  
00:15:22.940 --> 00:15:24.380 tumor and cancer staging can  
NOTE Confidence: 0.9733634  
00:15:24.380 --> 00:15:25.820 be linked to, you know,  
NOTE Confidence: 0.9733634  
00:15:25.820 --> 00:15:27.280 the clinical treatment practices.  
NOTE Confidence: 0.9822036  
00:15:27.900 --> 00:15:28.940 So that that's one of  
NOTE Confidence: 0.9822036

00:15:28.940 --> 00:15:30.320 the the advantage of Caboodle.  
NOTE Confidence: 0.9937866

00:15:31.035 --> 00:15:32.235 And the last step here  
NOTE Confidence: 0.9937866

00:15:32.235 --> 00:15:33.355 at Yale is there's an  
NOTE Confidence: 0.9937866

00:15:33.355 --> 00:15:34.415 additional transformation  
NOTE Confidence: 0.98257

00:15:35.035 --> 00:15:36.475 that that happens to move  
NOTE Confidence: 0.98257

00:15:36.475 --> 00:15:37.935 to the OMOP database.  
NOTE Confidence: 0.92960095

00:15:39.274 --> 00:15:40.815 The OMOP is the observational  
NOTE Confidence: 0.92960095

00:15:40.875 --> 00:15:43.115 medical outcomes partnership model. It's  
NOTE Confidence: 0.92960095

00:15:43.115 --> 00:15:44.815 a common data model using  
NOTE Confidence: 0.9916958

00:15:45.410 --> 00:15:47.170 open standards. It is something  
NOTE Confidence: 0.9916958

00:15:47.170 --> 00:15:48.150 that can be,  
NOTE Confidence: 0.92797023

00:15:48.930 --> 00:15:50.310 used across institutions.  
NOTE Confidence: 0.88512796

00:15:51.090 --> 00:15:53.330 And with that, the Cabool  
NOTE Confidence: 0.88512796

00:15:53.330 --> 00:15:55.010 data is moved into and  
NOTE Confidence: 0.88512796

00:15:55.010 --> 00:15:55.510 transformed  
NOTE Confidence: 0.86791843

00:15:55.890 --> 00:15:57.350 into the OMOP database,

NOTE Confidence: 0.9746839  
00:15:57.730 --> 00:15:58.690 and it has, on the  
NOTE Confidence: 0.9746839  
00:15:58.690 --> 00:16:00.230 order of thirty seven tables,  
NOTE Confidence: 0.99922657  
00:16:00.575 --> 00:16:02.255 a much more straightforward model  
NOTE Confidence: 0.99922657  
00:16:02.255 --> 00:16:02.835 to use.  
NOTE Confidence: 0.96241224  
00:16:03.375 --> 00:16:04.335 It has most of the  
NOTE Confidence: 0.96241224  
00:16:04.335 --> 00:16:06.095 data and, hopefully, a little  
NOTE Confidence: 0.96241224  
00:16:06.095 --> 00:16:07.055 bit less of a learning  
NOTE Confidence: 0.96241224  
00:16:07.055 --> 00:16:08.095 curve to to access the  
NOTE Confidence: 0.96241224  
00:16:08.095 --> 00:16:09.455 data. And as we talk  
NOTE Confidence: 0.96241224  
00:16:09.455 --> 00:16:10.575 a little bit more about,  
NOTE Confidence: 0.96241224  
00:16:10.575 --> 00:16:11.535 you know, the data that  
NOTE Confidence: 0.96241224  
00:16:11.535 --> 00:16:12.495 we provide, and for those  
NOTE Confidence: 0.96241224  
00:16:12.495 --> 00:16:13.295 of you who are gonna  
NOTE Confidence: 0.96241224  
00:16:13.295 --> 00:16:13.795 use,  
NOTE Confidence: 0.9273677  
00:16:14.820 --> 00:16:16.740 CHP and access direct access  
NOTE Confidence: 0.9273677

00:16:16.740 --> 00:16:17.940 to the data, we'll be  
NOTE Confidence: 0.9273677

00:16:17.940 --> 00:16:19.140 talking about you know, it'll  
NOTE Confidence: 0.9273677

00:16:19.140 --> 00:16:20.420 be from the OMOP tables  
NOTE Confidence: 0.9273677

00:16:20.420 --> 00:16:21.480 and the OMOP format.  
NOTE Confidence: 0.9817927

00:16:26.714 --> 00:16:27.915 So as I mentioned, you  
NOTE Confidence: 0.9817927

00:16:27.915 --> 00:16:28.795 know, one of our goals  
NOTE Confidence: 0.9817927

00:16:28.795 --> 00:16:30.634 is to promote self-service access  
NOTE Confidence: 0.9817927

00:16:30.634 --> 00:16:32.275 to data. And one of  
NOTE Confidence: 0.9817927

00:16:32.275 --> 00:16:33.355 the things that we have  
NOTE Confidence: 0.9817927

00:16:33.355 --> 00:16:34.555 been working on as a  
NOTE Confidence: 0.9817927

00:16:34.555 --> 00:16:35.055 team,  
NOTE Confidence: 0.936569

00:16:35.834 --> 00:16:37.834 is to improve the experience  
NOTE Confidence: 0.936569

00:16:37.834 --> 00:16:39.035 and speed of access to  
NOTE Confidence: 0.936569

00:16:39.035 --> 00:16:39.535 data,  
NOTE Confidence: 0.9788827

00:16:40.070 --> 00:16:41.590 through self-service tools. One of  
NOTE Confidence: 0.9788827

00:16:41.590 --> 00:16:42.710 the main ways is through

NOTE Confidence: 0.9788827  
00:16:42.710 --> 00:16:44.250 our research of basic access.  
NOTE Confidence: 0.9794445  
00:16:45.190 --> 00:16:47.110 We've also worked on promoting  
NOTE Confidence: 0.9794445  
00:16:47.110 --> 00:16:48.570 the use of slicer, dicer  
NOTE Confidence: 0.94744176  
00:16:49.430 --> 00:16:51.670 as a an analytics tool  
NOTE Confidence: 0.94744176  
00:16:51.670 --> 00:16:52.570 and allowing  
NOTE Confidence: 0.9995448  
00:16:53.110 --> 00:16:54.650 greater access to that.  
NOTE Confidence: 0.93020076  
00:16:56.765 --> 00:16:57.725 Also, I'll I'll show it  
NOTE Confidence: 0.93020076  
00:16:57.725 --> 00:16:59.165 to you later. But, in  
NOTE Confidence: 0.93020076  
00:16:59.165 --> 00:17:00.125 our request form, we have  
NOTE Confidence: 0.93020076  
00:17:00.125 --> 00:17:01.505 the JDate report library.  
NOTE Confidence: 0.9997999  
00:17:01.885 --> 00:17:03.345 All of the reports  
NOTE Confidence: 0.92225003  
00:17:03.885 --> 00:17:04.385 and,  
NOTE Confidence: 0.98600554  
00:17:04.685 --> 00:17:06.205 dashboards that have been put  
NOTE Confidence: 0.98600554  
00:17:06.205 --> 00:17:07.905 together by the the operational  
NOTE Confidence: 0.98600554  
00:17:07.965 --> 00:17:10.225 clinical joint data analytics team  
NOTE Confidence: 0.98600554

00:17:10.309 --> 00:17:10.970 are available  
NOTE Confidence: 0.95383024

00:17:11.270 --> 00:17:12.250 available for search,  
NOTE Confidence: 0.95211494

00:17:12.630 --> 00:17:14.230 and they may actually they've  
NOTE Confidence: 0.95211494

00:17:14.230 --> 00:17:15.510 been, vetted by,  
NOTE Confidence: 0.9991298

00:17:16.070 --> 00:17:16.970 clinical practices  
NOTE Confidence: 0.96953726

00:17:17.429 --> 00:17:19.109 and may provide an excellent  
NOTE Confidence: 0.96953726

00:17:19.109 --> 00:17:20.070 start or the data that  
NOTE Confidence: 0.96953726

00:17:20.070 --> 00:17:21.210 you need for your,  
NOTE Confidence: 0.99691063

00:17:21.669 --> 00:17:23.049 for your research projects.  
NOTE Confidence: 0.7982862

00:17:24.385 --> 00:17:25.925 Prep to research is  
NOTE Confidence: 0.96179426

00:17:26.305 --> 00:17:27.825 a an area that we'll  
NOTE Confidence: 0.96179426

00:17:27.825 --> 00:17:28.545 talk about a little bit  
NOTE Confidence: 0.96179426

00:17:28.545 --> 00:17:29.984 more, but that is where,  
NOTE Confidence: 0.95331186

00:17:30.385 --> 00:17:32.305 we'll give you quicker access  
NOTE Confidence: 0.95331186

00:17:32.305 --> 00:17:33.665 to the OMOP data for  
NOTE Confidence: 0.95331186

00:17:33.665 --> 00:17:34.165 self-service.



NOTE Confidence: 0.98858905  
00:17:35.185 --> 00:17:36.305 And two last things that  
NOTE Confidence: 0.98858905  
00:17:36.305 --> 00:17:37.125 we have added,  
NOTE Confidence: 0.7812212  
00:17:38.225 --> 00:17:39.125 on an interactive  
NOTE Confidence: 0.995257  
00:17:39.559 --> 00:17:40.380 basis is  
NOTE Confidence: 0.98099583  
00:17:40.760 --> 00:17:42.600 our JADA office hours. You  
NOTE Confidence: 0.98099583  
00:17:42.600 --> 00:17:44.119 can request a consult with  
NOTE Confidence: 0.98099583  
00:17:44.119 --> 00:17:45.320 one of our one of  
NOTE Confidence: 0.98099583  
00:17:45.320 --> 00:17:46.760 our team to help with,  
NOTE Confidence: 0.98099583  
00:17:46.760 --> 00:17:48.440 you know, understanding the data  
NOTE Confidence: 0.98099583  
00:17:48.440 --> 00:17:49.419 that's out there,  
NOTE Confidence: 0.9682012  
00:17:50.119 --> 00:17:51.640 working on slicer, dicer, but  
NOTE Confidence: 0.9682012  
00:17:51.640 --> 00:17:53.160 we're now opening up this  
NOTE Confidence: 0.9682012  
00:17:53.160 --> 00:17:54.025 time so so that we  
NOTE Confidence: 0.9682012  
00:17:54.025 --> 00:17:55.305 can provide more hands on  
NOTE Confidence: 0.9682012  
00:17:55.305 --> 00:17:55.805 support.  
NOTE Confidence: 0.8970464

00:17:56.585 --> 00:17:57.705 And the last thing I  
NOTE Confidence: 0.8970464

00:17:57.705 --> 00:17:59.244 just mentioned is we've recently  
NOTE Confidence: 0.8970464

00:17:59.465 --> 00:18:01.165 kicked off a Teams channel,  
NOTE Confidence: 0.9554609

00:18:01.545 --> 00:18:03.545 supporting, OMOP and OMOP data  
NOTE Confidence: 0.9554609

00:18:03.545 --> 00:18:05.005 model. So looking  
NOTE Confidence: 0.9986376

00:18:05.465 --> 00:18:06.345 to work with you all  
NOTE Confidence: 0.9986376

00:18:06.345 --> 00:18:07.645 as a community to  
NOTE Confidence: 0.9660503

00:18:07.970 --> 00:18:09.410 work on questions and answers,  
NOTE Confidence: 0.9660503

00:18:09.410 --> 00:18:10.070 a collaborative  
NOTE Confidence: 0.99139786

00:18:10.450 --> 00:18:12.369 space, and access to some  
NOTE Confidence: 0.99139786

00:18:12.369 --> 00:18:13.650 of our, you know, tips  
NOTE Confidence: 0.99139786

00:18:13.650 --> 00:18:14.310 and tricks.  
NOTE Confidence: 0.8819116

00:18:19.890 --> 00:18:21.570 Researcher basic access or we  
NOTE Confidence: 0.8819116

00:18:21.570 --> 00:18:22.725 keep referring to a lot  
NOTE Confidence: 0.8819116

00:18:22.725 --> 00:18:24.305 of times by acronyms. RBA  
NOTE Confidence: 0.8819116

00:18:24.445 --> 00:18:25.505 is a consolidation

NOTE Confidence: 0.92606544

00:18:26.205 --> 00:18:27.905 of security roles that

NOTE Confidence: 0.9709375

00:18:28.285 --> 00:18:29.645 researchers often will need to

NOTE Confidence: 0.9709375

00:18:29.645 --> 00:18:31.484 use to access common systems

NOTE Confidence: 0.9709375

00:18:31.484 --> 00:18:33.005 and tools. We've noticed that

NOTE Confidence: 0.9709375

00:18:33.005 --> 00:18:35.405 there's been, historically trouble getting

NOTE Confidence: 0.9709375

00:18:35.405 --> 00:18:36.705 access to many of the

NOTE Confidence: 0.9709375

00:18:36.845 --> 00:18:37.585 EPIC systems

NOTE Confidence: 0.98138285

00:18:38.340 --> 00:18:39.299 or many of the data,

NOTE Confidence: 0.8672709

00:18:40.820 --> 00:18:42.119 models and data roles.

NOTE Confidence: 0.95580465

00:18:42.660 --> 00:18:44.500 And mostly due to multiple

NOTE Confidence: 0.95580465

00:18:44.500 --> 00:18:46.340 iterations, the information isn't always

NOTE Confidence: 0.95580465

00:18:46.340 --> 00:18:46.840 available,

NOTE Confidence: 0.9976952

00:18:47.540 --> 00:18:48.820 how to apply for this.

NOTE Confidence: 0.9976952

00:18:48.820 --> 00:18:49.720 So we've consolidated

NOTE Confidence: 0.97690415

00:18:51.105 --> 00:18:52.785 all of this into one

NOTE Confidence: 0.97690415

00:18:52.785 --> 00:18:54.305 role, which we can help  
NOTE Confidence: 0.97690415  
00:18:54.305 --> 00:18:54.805 administer.  
NOTE Confidence: 0.9281538  
00:18:55.265 --> 00:18:56.225 It will help you with  
NOTE Confidence: 0.9281538  
00:18:56.225 --> 00:18:57.425 things like if you don't  
NOTE Confidence: 0.9281538  
00:18:57.425 --> 00:18:57.825 have a,  
NOTE Confidence: 0.9150458  
00:18:58.465 --> 00:18:59.585 Yale name and health system  
NOTE Confidence: 0.9150458  
00:18:59.585 --> 00:19:00.705 ID or epic ID, we  
NOTE Confidence: 0.9150458  
00:19:00.705 --> 00:19:02.244 can help that provision that.  
NOTE Confidence: 0.9150458  
00:19:02.385 --> 00:19:03.744 It'll get you access to  
NOTE Confidence: 0.9150458  
00:19:03.744 --> 00:19:05.760 the epic epic slicer dicer  
NOTE Confidence: 0.9150458  
00:19:05.820 --> 00:19:06.320 tool,  
NOTE Confidence: 0.99909484  
00:19:07.100 --> 00:19:08.800 with expanded data models.  
NOTE Confidence: 0.9907026  
00:19:09.260 --> 00:19:10.700 It will also allow you  
NOTE Confidence: 0.9907026  
00:19:10.700 --> 00:19:12.320 to get the basic security  
NOTE Confidence: 0.9907026  
00:19:12.380 --> 00:19:14.480 for the, computational health platform  
NOTE Confidence: 0.9412142  
00:19:14.940 --> 00:19:15.260 and,

NOTE Confidence: 0.9222059  
00:19:15.740 --> 00:19:17.340 Camino counts, which is the  
NOTE Confidence: 0.9222059  
00:19:17.340 --> 00:19:18.559 first step in Camino,  
NOTE Confidence: 0.94645756  
00:19:19.505 --> 00:19:20.565 camino team provisioning.  
NOTE Confidence: 0.9950414  
00:19:21.985 --> 00:19:24.145 And, it also will provision  
NOTE Confidence: 0.9950414  
00:19:24.145 --> 00:19:25.744 for you the access to  
NOTE Confidence: 0.9950414  
00:19:25.744 --> 00:19:26.945 the VDI that we talked  
NOTE Confidence: 0.9950414  
00:19:26.945 --> 00:19:28.065 about so that you have  
NOTE Confidence: 0.9950414  
00:19:28.065 --> 00:19:29.845 that secure computing environment,  
NOTE Confidence: 0.9675631  
00:19:30.465 --> 00:19:31.985 that's preloaded as a Windows  
NOTE Confidence: 0.9675631  
00:19:31.985 --> 00:19:33.450 environment with a number of  
NOTE Confidence: 0.9675631  
00:19:33.609 --> 00:19:35.529 common tools. Hopefully, helpful tools  
NOTE Confidence: 0.9675631  
00:19:35.529 --> 00:19:36.350 are Python,  
NOTE Confidence: 0.9884169  
00:19:36.889 --> 00:19:38.429 Microsoft Office, OneDrive,  
NOTE Confidence: 0.9930167  
00:19:39.130 --> 00:19:41.130 SQL, Visual Studio, and the  
NOTE Confidence: 0.9930167  
00:19:41.130 --> 00:19:42.269 list is growing.  
NOTE Confidence: 0.89360785

00:19:45.705 --> 00:19:46.664 So I just wanna touch  
NOTE Confidence: 0.89360785

00:19:46.664 --> 00:19:48.105 on how to get, re  
NOTE Confidence: 0.89360785

00:19:48.505 --> 00:19:49.784 how to request research and  
NOTE Confidence: 0.89360785

00:19:49.784 --> 00:19:50.525 basic access.  
NOTE Confidence: 0.9877555

00:19:51.465 --> 00:19:52.105 It used to be a  
NOTE Confidence: 0.9877555

00:19:52.105 --> 00:19:53.705 lengthy process. Really, it is  
NOTE Confidence: 0.9877555

00:19:53.705 --> 00:19:55.304 now a very, very quick  
NOTE Confidence: 0.9877555

00:19:55.304 --> 00:19:56.044 one stop  
NOTE Confidence: 0.99680424

00:19:56.345 --> 00:19:57.304 shop. It is  
NOTE Confidence: 0.9993695

00:19:58.190 --> 00:19:58.850 it replaces  
NOTE Confidence: 0.9991333

00:19:59.230 --> 00:19:59.730 several  
NOTE Confidence: 0.76979625

00:20:00.270 --> 00:20:00.770 requests.  
NOTE Confidence: 0.92378175

00:20:01.390 --> 00:20:02.670 It can one thing I  
NOTE Confidence: 0.92378175

00:20:02.670 --> 00:20:03.710 will note that it this  
NOTE Confidence: 0.92378175

00:20:03.710 --> 00:20:05.390 is a security access, so  
NOTE Confidence: 0.92378175

00:20:05.390 --> 00:20:06.290 it needs to be,

NOTE Confidence: 0.94619966  
00:20:06.990 --> 00:20:07.490 submitted,  
NOTE Confidence: 0.9936507  
00:20:08.190 --> 00:20:09.890 to the health system via  
NOTE Confidence: 0.9936507  
00:20:10.030 --> 00:20:11.650 your supervisor or PI.  
NOTE Confidence: 0.9103541  
00:20:12.165 --> 00:20:13.125 So that means you need  
NOTE Confidence: 0.9103541  
00:20:13.125 --> 00:20:13.785 a YNHH  
NOTE Confidence: 0.55602026  
00:20:14.085 --> 00:20:14.585 ID  
NOTE Confidence: 0.99651784  
00:20:15.285 --> 00:20:16.645 to have access to this.  
NOTE Confidence: 0.99651784  
00:20:16.645 --> 00:20:17.845 If you have trouble accessing  
NOTE Confidence: 0.99651784  
00:20:17.845 --> 00:20:18.965 it, email me. I can  
NOTE Confidence: 0.99651784  
00:20:18.965 --> 00:20:20.425 assist with that as well.  
NOTE Confidence: 0.9204504  
00:20:20.805 --> 00:20:22.405 But, the form is very  
NOTE Confidence: 0.9204504  
00:20:22.405 --> 00:20:23.525 easy to fill out. You  
NOTE Confidence: 0.9204504  
00:20:23.525 --> 00:20:24.645 just need based on basic  
NOTE Confidence: 0.9204504  
00:20:24.645 --> 00:20:25.145 information  
NOTE Confidence: 0.92651635  
00:20:25.445 --> 00:20:27.180 such as who you are,  
NOTE Confidence: 0.96339864

00:20:27.580 --> 00:20:29.180 who who needs it, and  
NOTE Confidence: 0.96339864

00:20:29.180 --> 00:20:29.820 you need to be a  
NOTE Confidence: 0.96339864

00:20:29.820 --> 00:20:31.180 member of the covered entity  
NOTE Confidence: 0.96339864

00:20:31.180 --> 00:20:32.960 or typically school of medicine  
NOTE Confidence: 0.96339864

00:20:33.100 --> 00:20:34.960 or sponsored by someone.  
NOTE Confidence: 0.9707869

00:20:40.475 --> 00:20:41.915 SlicerDicer, if you have had  
NOTE Confidence: 0.9707869

00:20:41.915 --> 00:20:42.715 a chance, if you're in  
NOTE Confidence: 0.9707869

00:20:42.715 --> 00:20:43.675 Epic, you may have seen  
NOTE Confidence: 0.9707869

00:20:43.675 --> 00:20:45.135 this already, but SlicerDicer  
NOTE Confidence: 0.98017

00:20:45.515 --> 00:20:46.255 is Epic's,  
NOTE Confidence: 0.9992199

00:20:47.035 --> 00:20:49.055 data exploration and visual tool.  
NOTE Confidence: 0.9992199

00:20:49.355 --> 00:20:50.575 It is a powerful  
NOTE Confidence: 0.9959925

00:20:51.035 --> 00:20:51.535 self-service  
NOTE Confidence: 0.9997725

00:20:51.915 --> 00:20:52.415 tool  
NOTE Confidence: 0.9527776

00:20:52.840 --> 00:20:53.960 and allowing you to do  
NOTE Confidence: 0.9527776

00:20:53.960 --> 00:20:55.640 things such as define patient



NOTE Confidence: 0.9527776  
00:20:55.640 --> 00:20:56.140 cohorts,  
NOTE Confidence: 0.9993134  
00:20:57.320 --> 00:20:58.780 based on clinical criteria  
NOTE Confidence: 0.97170115  
00:20:59.320 --> 00:21:01.320 and really explore the data  
NOTE Confidence: 0.97170115  
00:21:01.320 --> 00:21:03.260 that is available to you.  
NOTE Confidence: 0.97170115  
00:21:03.320 --> 00:21:04.695 In some cases, it can  
NOTE Confidence: 0.97170115  
00:21:04.934 --> 00:21:05.894 do all of your it  
NOTE Confidence: 0.97170115  
00:21:05.894 --> 00:21:06.695 can be used as a  
NOTE Confidence: 0.97170115  
00:21:06.695 --> 00:21:07.654 tool for all of your  
NOTE Confidence: 0.97170115  
00:21:07.654 --> 00:21:09.414 analysis. In other cases, it  
NOTE Confidence: 0.97170115  
00:21:09.414 --> 00:21:11.014 will be a great tool  
NOTE Confidence: 0.97170115  
00:21:11.014 --> 00:21:12.154 to set up,  
NOTE Confidence: 0.96012056  
00:21:12.455 --> 00:21:13.575 explore the data and work  
NOTE Confidence: 0.96012056  
00:21:13.575 --> 00:21:14.375 with some of the other  
NOTE Confidence: 0.96012056  
00:21:14.375 --> 00:21:14.875 teams.  
NOTE Confidence: 0.96767604  
00:21:15.335 --> 00:21:16.475 So SlicerDicer  
NOTE Confidence: 0.9660275

00:21:17.014 --> 00:21:17.514 is,  
NOTE Confidence: 0.97904354

00:21:18.460 --> 00:21:20.299 it provides aggregate data. There's  
NOTE Confidence: 0.97904354

00:21:20.299 --> 00:21:21.440 there's no PHI,  
NOTE Confidence: 0.9933548

00:21:22.139 --> 00:21:23.340 so you don't need an  
NOTE Confidence: 0.9933548

00:21:23.340 --> 00:21:25.100 IRB to explore the data  
NOTE Confidence: 0.9933548

00:21:25.100 --> 00:21:26.460 within it. So that's one  
NOTE Confidence: 0.9933548

00:21:26.460 --> 00:21:27.820 of the advantage of using  
NOTE Confidence: 0.9933548

00:21:27.820 --> 00:21:29.200 these self-service tools.  
NOTE Confidence: 0.9646088

00:21:31.095 --> 00:21:31.895 It's a great way to  
NOTE Confidence: 0.9646088

00:21:31.895 --> 00:21:33.335 get an under overall picture  
NOTE Confidence: 0.9646088

00:21:33.335 --> 00:21:34.855 of your study study cohort.  
NOTE Confidence: 0.9646088

00:21:34.855 --> 00:21:35.815 You can add in the  
NOTE Confidence: 0.9646088

00:21:35.815 --> 00:21:37.494 middle. You can it's kinda  
NOTE Confidence: 0.9646088

00:21:37.494 --> 00:21:39.095 small. I know. But there  
NOTE Confidence: 0.9646088

00:21:39.095 --> 00:21:39.595 are  
NOTE Confidence: 0.99862826

00:21:40.375 --> 00:21:41.815 ways to you can add

NOTE Confidence: 0.99862826  
00:21:41.815 --> 00:21:42.475 the criteria.  
NOTE Confidence: 0.969171  
00:21:43.410 --> 00:21:45.010 So this one, the blue  
NOTE Confidence: 0.969171  
00:21:45.010 --> 00:21:45.510 boxes  
NOTE Confidence: 0.9762217  
00:21:45.970 --> 00:21:47.330 are the actual filters and  
NOTE Confidence: 0.9762217  
00:21:47.330 --> 00:21:49.109 criterias you can filter on.  
NOTE Confidence: 0.9995671  
00:21:49.410 --> 00:21:51.270 The orange are  
NOTE Confidence: 0.92091274  
00:21:51.570 --> 00:21:53.030 the folders which  
NOTE Confidence: 0.97009283  
00:21:53.570 --> 00:21:55.510 organize similar criteria.  
NOTE Confidence: 0.9945538  
00:21:56.145 --> 00:21:58.145 This example is defined to  
NOTE Confidence: 0.9945538  
00:21:58.145 --> 00:21:59.605 pick patients with diabetes  
NOTE Confidence: 0.89617854  
00:22:00.145 --> 00:22:01.445 who are not on prednisone  
NOTE Confidence: 0.89617854  
00:22:01.505 --> 00:22:02.885 and that patient age of  
NOTE Confidence: 0.89617854  
00:22:02.945 --> 00:22:03.905 eighteen to a hundred and  
NOTE Confidence: 0.89617854  
00:22:03.905 --> 00:22:05.845 eight with an abnormal hemoglobin  
NOTE Confidence: 0.89617854  
00:22:05.984 --> 00:22:07.365 a one c. So  
NOTE Confidence: 0.9992689

00:22:07.665 --> 00:22:09.365 you can build very complex

NOTE Confidence: 0.9997924

00:22:10.200 --> 00:22:10.700 clinical

NOTE Confidence: 0.9332872

00:22:11.320 --> 00:22:12.679 criteria. You can one of

NOTE Confidence: 0.9332872

00:22:12.679 --> 00:22:13.880 the big tools and hence

NOTE Confidence: 0.9332872

00:22:13.880 --> 00:22:15.480 the name is you can

NOTE Confidence: 0.9332872

00:22:15.480 --> 00:22:16.299 add slices,

NOTE Confidence: 0.99971175

00:22:16.600 --> 00:22:18.039 and that allows you to

NOTE Confidence: 0.99971175

00:22:18.039 --> 00:22:19.820 break up the data

NOTE Confidence: 0.9995847

00:22:20.440 --> 00:22:21.500 by those criteria

NOTE Confidence: 0.98208845

00:22:22.085 --> 00:22:23.365 and this or even define

NOTE Confidence: 0.98208845

00:22:23.365 --> 00:22:24.405 the ranges. So in this

NOTE Confidence: 0.98208845

00:22:24.405 --> 00:22:26.185 case, we've defined we

NOTE Confidence: 0.90486264

00:22:26.725 --> 00:22:28.085 want to break and graph

NOTE Confidence: 0.90486264

00:22:28.085 --> 00:22:28.585 by,

NOTE Confidence: 0.9890793

00:22:29.285 --> 00:22:30.265 an age cohort.

NOTE Confidence: 0.83142394

00:22:30.725 --> 00:22:32.244 We've set the age core

NOTE Confidence: 0.83142394  
00:22:32.325 --> 00:22:32.825 or  
NOTE Confidence: 0.99127954  
00:22:33.285 --> 00:22:34.885 based on the stops in  
NOTE Confidence: 0.99127954  
00:22:34.885 --> 00:22:35.385 there.  
NOTE Confidence: 0.9947338  
00:22:37.330 --> 00:22:38.369 So that is,  
NOTE Confidence: 0.9997264  
00:22:38.850 --> 00:22:39.750 showing us  
NOTE Confidence: 0.9172225  
00:22:40.929 --> 00:22:42.789 multiple ways to do that.  
NOTE Confidence: 0.97437954  
00:22:48.475 --> 00:22:50.075 Additionally, there as I mentioned,  
NOTE Confidence: 0.97437954  
00:22:50.315 --> 00:22:51.755 you get additional with the  
NOTE Confidence: 0.97437954  
00:22:51.755 --> 00:22:52.894 RBA, you get,  
NOTE Confidence: 0.99938464  
00:22:53.595 --> 00:22:55.514 twenty five additional clinical data  
NOTE Confidence: 0.99938464  
00:22:55.514 --> 00:22:56.875 models that are not accessible  
NOTE Confidence: 0.99938464  
00:22:56.875 --> 00:22:57.534 to everyone.  
NOTE Confidence: 0.9906519  
00:22:58.154 --> 00:22:59.514 You can link these models.  
NOTE Confidence: 0.9906519  
00:22:59.514 --> 00:23:00.475 So if you develop a  
NOTE Confidence: 0.9906519  
00:23:00.475 --> 00:23:02.170 patient cohort and you need  
NOTE Confidence: 0.9906519

00:23:02.170 --> 00:23:04.350 to see, detailed lab specifics,  
NOTE Confidence: 0.9906519

00:23:04.570 --> 00:23:05.530 you can link to the  
NOTE Confidence: 0.9906519

00:23:05.530 --> 00:23:06.970 lab model. So it really  
NOTE Confidence: 0.9906519

00:23:06.970 --> 00:23:08.510 gives you the ability to,  
NOTE Confidence: 0.94980687

00:23:09.690 --> 00:23:11.609 expand your queries. And also  
NOTE Confidence: 0.94980687

00:23:11.609 --> 00:23:12.890 by using the slices and  
NOTE Confidence: 0.94980687

00:23:12.890 --> 00:23:13.869 some of the top  
NOTE Confidence: 0.9932342

00:23:14.475 --> 00:23:16.155 ten, top fifty features, you  
NOTE Confidence: 0.9932342

00:23:16.155 --> 00:23:17.434 can drill down to see  
NOTE Confidence: 0.9932342

00:23:17.434 --> 00:23:18.335 what are the  
NOTE Confidence: 0.99221325

00:23:18.635 --> 00:23:20.234 categories of the data. You  
NOTE Confidence: 0.99221325

00:23:20.234 --> 00:23:21.275 can use it to help  
NOTE Confidence: 0.99221325

00:23:21.275 --> 00:23:21.775 define,  
NOTE Confidence: 0.9902056

00:23:22.395 --> 00:23:23.355 some of your queries. So  
NOTE Confidence: 0.9902056

00:23:23.355 --> 00:23:24.155 if you need to know  
NOTE Confidence: 0.9902056

00:23:24.155 --> 00:23:25.195 what are the lab value

NOTE Confidence: 0.9902056  
00:23:25.195 --> 00:23:26.315 ranges, what are the names  
NOTE Confidence: 0.9902056  
00:23:26.315 --> 00:23:27.550 of the labs, what are  
NOTE Confidence: 0.9902056  
00:23:27.550 --> 00:23:29.310 the diagnoses involved with this,  
NOTE Confidence: 0.9902056  
00:23:29.310 --> 00:23:30.109 you can do a lot  
NOTE Confidence: 0.9902056  
00:23:30.109 --> 00:23:31.390 of that exploration right through  
NOTE Confidence: 0.9902056  
00:23:31.390 --> 00:23:32.130 this tool,  
NOTE Confidence: 0.9983301  
00:23:32.510 --> 00:23:33.630 without having to write any  
NOTE Confidence: 0.9983301  
00:23:33.630 --> 00:23:34.609 queries at all.  
NOTE Confidence: 0.8330512  
00:23:40.385 --> 00:23:42.165 So preparatory to research  
NOTE Confidence: 0.97660303  
00:23:42.465 --> 00:23:42.965 is,  
NOTE Confidence: 0.8610481  
00:23:43.345 --> 00:23:44.545 as we keep calling it  
NOTE Confidence: 0.8610481  
00:23:44.545 --> 00:23:45.365 p two r,  
NOTE Confidence: 0.8945458  
00:23:45.744 --> 00:23:46.244 is,  
NOTE Confidence: 0.9954988  
00:23:47.345 --> 00:23:48.545 one of the ways that  
NOTE Confidence: 0.9954988  
00:23:48.545 --> 00:23:50.385 we can help put data  
NOTE Confidence: 0.9954988

00:23:50.385 --> 00:23:51.265 in your hands a lot  
NOTE Confidence: 0.9954988  
00:23:51.265 --> 00:23:51.765 quicker.  
NOTE Confidence: 0.9474256  
00:23:52.930 --> 00:23:54.550 With the preparatory to research,  
NOTE Confidence: 0.9474256  
00:23:54.609 --> 00:23:55.890 if you fill out the  
NOTE Confidence: 0.9474256  
00:23:55.890 --> 00:23:57.190 form got a little screenshot,  
NOTE Confidence: 0.9352895  
00:23:57.570 --> 00:23:58.930 and I have links to  
NOTE Confidence: 0.9352895  
00:23:58.930 --> 00:24:01.170 all of these, request forms  
NOTE Confidence: 0.9352895  
00:24:01.170 --> 00:24:02.609 or request applications at the  
NOTE Confidence: 0.9352895  
00:24:02.609 --> 00:24:04.369 end of the presentation. So,  
NOTE Confidence: 0.9352895  
00:24:04.609 --> 00:24:05.970 that Pina can share that  
NOTE Confidence: 0.9352895  
00:24:05.970 --> 00:24:06.630 with you.  
NOTE Confidence: 0.96426344  
00:24:08.665 --> 00:24:09.965 This will allow you  
NOTE Confidence: 0.95947605  
00:24:10.585 --> 00:24:11.785 to get access to the  
NOTE Confidence: 0.95947605  
00:24:11.785 --> 00:24:13.785 OMOP limited dataset for for  
NOTE Confidence: 0.95947605  
00:24:13.785 --> 00:24:15.065 ninety days with the goal  
NOTE Confidence: 0.95947605  
00:24:15.065 --> 00:24:16.105 of using it. You have



NOTE Confidence: 0.95947605  
00:24:16.105 --> 00:24:17.085 access to,  
NOTE Confidence: 0.9523105  
00:24:18.105 --> 00:24:19.305 the dataset which, you know,  
NOTE Confidence: 0.9523105  
00:24:19.305 --> 00:24:20.905 the thirty seven tables with  
NOTE Confidence: 0.9523105  
00:24:20.905 --> 00:24:21.805 direct identifiers  
NOTE Confidence: 0.99915695  
00:24:22.105 --> 00:24:23.560 removed so that you can  
NOTE Confidence: 0.99915695  
00:24:23.560 --> 00:24:24.540 query the data,  
NOTE Confidence: 0.9917658  
00:24:24.920 --> 00:24:26.520 do some detailed analysis of  
NOTE Confidence: 0.9917658  
00:24:26.520 --> 00:24:28.280 your cohorts, maybe even define  
NOTE Confidence: 0.9917658  
00:24:28.280 --> 00:24:29.820 the queries for your datasets  
NOTE Confidence: 0.9777746  
00:24:30.280 --> 00:24:31.320 so that you can you  
NOTE Confidence: 0.9777746  
00:24:31.320 --> 00:24:33.660 can, you know, create, datasets  
NOTE Confidence: 0.9777746  
00:24:33.720 --> 00:24:35.180 to use, develop your protocol.  
NOTE Confidence: 0.9987711  
00:24:36.040 --> 00:24:36.680 At the end of the  
NOTE Confidence: 0.9987711  
00:24:36.680 --> 00:24:37.500 ninety days,  
NOTE Confidence: 0.9987627  
00:24:37.800 --> 00:24:38.380 you can  
NOTE Confidence: 0.9735819

00:24:39.385 --> 00:24:41.065 switch that over, convert that

NOTE Confidence: 0.9735819

00:24:41.065 --> 00:24:42.365 over with the help of,

NOTE Confidence: 0.9576037

00:24:43.145 --> 00:24:44.905 the JADAP team into an

NOTE Confidence: 0.9576037

00:24:44.905 --> 00:24:46.105 IRB once you have your

NOTE Confidence: 0.9576037

00:24:46.105 --> 00:24:46.925 IRB protocol,

NOTE Confidence: 0.9905304

00:24:47.465 --> 00:24:49.405 into an IRB approved project,

NOTE Confidence: 0.9905304

00:24:49.545 --> 00:24:51.225 we can help provision those

NOTE Confidence: 0.9905304

00:24:51.225 --> 00:24:51.725 datasets,

NOTE Confidence: 0.8779103

00:24:52.090 --> 00:24:53.690 essentially execute those queries, give

NOTE Confidence: 0.8779103

00:24:53.690 --> 00:24:54.970 you exactly the data that

NOTE Confidence: 0.8779103

00:24:54.970 --> 00:24:56.110 you were looking for,

NOTE Confidence: 0.99944276

00:24:56.650 --> 00:24:57.790 along with identifiers.

NOTE Confidence: 0.98929125

00:25:00.330 --> 00:25:00.830 So

NOTE Confidence: 0.99518496

00:25:01.450 --> 00:25:03.290 this can be done by

NOTE Confidence: 0.99518496

00:25:03.290 --> 00:25:04.810 submitting a research data request,

NOTE Confidence: 0.99518496

00:25:04.810 --> 00:25:06.090 which I'll talk about next,

NOTE Confidence: 0.99518496  
00:25:06.090 --> 00:25:07.630 and including this form  
NOTE Confidence: 0.95483893  
00:25:07.984 --> 00:25:09.025 and the statement that you're  
NOTE Confidence: 0.95483893  
00:25:09.025 --> 00:25:10.225 looking for prep to research  
NOTE Confidence: 0.95483893  
00:25:10.225 --> 00:25:12.005 because you are working on,  
NOTE Confidence: 0.97469616  
00:25:12.785 --> 00:25:14.244 you know, developing a protocol.  
NOTE Confidence: 0.9354555  
00:25:19.825 --> 00:25:21.040 I I think, Nate's gonna  
NOTE Confidence: 0.9354555  
00:25:21.040 --> 00:25:21.760 talk about this more, but  
NOTE Confidence: 0.9354555  
00:25:21.760 --> 00:25:22.480 I just wanted to talk  
NOTE Confidence: 0.9354555  
00:25:22.480 --> 00:25:23.280 a little bit about the  
NOTE Confidence: 0.9354555  
00:25:23.280 --> 00:25:24.420 the OMAP dataset,  
NOTE Confidence: 0.94700044  
00:25:25.359 --> 00:25:26.720 with a small graphic just  
NOTE Confidence: 0.94700044  
00:25:26.720 --> 00:25:27.600 to show you it is  
NOTE Confidence: 0.94700044  
00:25:27.600 --> 00:25:28.800 is not as complex of  
NOTE Confidence: 0.94700044  
00:25:28.800 --> 00:25:29.920 a data model as some  
NOTE Confidence: 0.94700044  
00:25:29.920 --> 00:25:31.440 of as as Clarity, we  
NOTE Confidence: 0.94700044

00:25:31.440 --> 00:25:32.260 certainly couldn't,  
NOTE Confidence: 0.9221747

00:25:32.924 --> 00:25:33.424 propose.  
NOTE Confidence: 0.93353635

00:25:33.804 --> 00:25:35.644 But the the the you  
NOTE Confidence: 0.93353635

00:25:35.644 --> 00:25:36.865 know, based on the standards,  
NOTE Confidence: 0.96348816

00:25:37.804 --> 00:25:38.605 these are some of the  
NOTE Confidence: 0.96348816

00:25:38.605 --> 00:25:40.284 tables that people are finding  
NOTE Confidence: 0.96348816

00:25:40.284 --> 00:25:41.424 to be most useful.  
NOTE Confidence: 0.9286536

00:25:42.205 --> 00:25:43.804 You have direct access for  
NOTE Confidence: 0.9286536

00:25:44.044 --> 00:25:45.325 to query these except for  
NOTE Confidence: 0.9286536

00:25:45.325 --> 00:25:46.445 the MRNs and some of  
NOTE Confidence: 0.9286536

00:25:46.445 --> 00:25:47.345 the direct identifiers.  
NOTE Confidence: 0.92039615

00:25:48.210 --> 00:25:49.650 Once you have prep to  
NOTE Confidence: 0.92039615

00:25:49.650 --> 00:25:50.950 research, you know, and  
NOTE Confidence: 0.9411768

00:25:51.409 --> 00:25:52.609 you will need to,  
NOTE Confidence: 0.9302334

00:25:53.730 --> 00:25:54.850 so so one thing, you'll  
NOTE Confidence: 0.9302334

00:25:54.850 --> 00:25:56.690 need to, submit for RBA

NOTE Confidence: 0.9302334  
00:25:56.690 --> 00:25:58.230 so they have access to  
NOTE Confidence: 0.9302334  
00:25:58.289 --> 00:25:58.950 the platforms.  
NOTE Confidence: 0.9466209  
00:26:00.225 --> 00:26:01.184 But on this,  
NOTE Confidence: 0.99862784  
00:26:02.145 --> 00:26:03.285 thirty seven tables,  
NOTE Confidence: 0.94417137  
00:26:03.744 --> 00:26:04.545 these are some of the  
NOTE Confidence: 0.94417137  
00:26:04.545 --> 00:26:06.145 most, frequent I have a  
NOTE Confidence: 0.94417137  
00:26:06.145 --> 00:26:07.265 asterisk next to the note  
NOTE Confidence: 0.94417137  
00:26:07.265 --> 00:26:07.765 table.  
NOTE Confidence: 0.9576881  
00:26:08.304 --> 00:26:09.984 The notes, and I assume  
NOTE Confidence: 0.9576881  
00:26:09.984 --> 00:26:10.945 if you're you're gonna work  
NOTE Confidence: 0.9576881  
00:26:10.945 --> 00:26:12.225 a lot with LLMs, that's  
NOTE Confidence: 0.9576881  
00:26:12.225 --> 00:26:12.945 probably one of the key  
NOTE Confidence: 0.9576881  
00:26:12.945 --> 00:26:14.244 things you're looking for.  
NOTE Confidence: 0.9369631  
00:26:15.809 --> 00:26:17.250 Notes are because they they're  
NOTE Confidence: 0.9369631  
00:26:17.250 --> 00:26:18.690 not easily de identified, are  
NOTE Confidence: 0.9369631

00:26:18.690 --> 00:26:20.450 not included as part of  
NOTE Confidence: 0.9369631

00:26:20.450 --> 00:26:21.830 the limited dataset.  
NOTE Confidence: 0.9228491

00:26:22.369 --> 00:26:24.049 However, once you've, you know,  
NOTE Confidence: 0.9228491

00:26:24.049 --> 00:26:25.429 developed a patient cohort,  
NOTE Confidence: 0.9814366

00:26:25.809 --> 00:26:26.869 JDAT can  
NOTE Confidence: 0.99954975

00:26:27.965 --> 00:26:29.345 can execute those queries  
NOTE Confidence: 0.9362233

00:26:29.805 --> 00:26:31.565 and provide you the the  
NOTE Confidence: 0.9362233

00:26:31.565 --> 00:26:33.165 the notes that map to  
NOTE Confidence: 0.9362233

00:26:33.165 --> 00:26:35.425 your dataset and linking values,  
NOTE Confidence: 0.9980488

00:26:35.885 --> 00:26:36.605 so that you have the  
NOTE Confidence: 0.9980488

00:26:36.605 --> 00:26:37.984 PHI readily available.  
NOTE Confidence: 0.9532315

00:26:44.420 --> 00:26:45.860 Alright. So maybe the question  
NOTE Confidence: 0.9532315

00:26:45.860 --> 00:26:46.900 is a lot of people  
NOTE Confidence: 0.9532315

00:26:46.900 --> 00:26:48.180 ask is, okay. How how  
NOTE Confidence: 0.9532315

00:26:48.180 --> 00:26:48.900 do I get this? How  
NOTE Confidence: 0.9532315

00:26:48.900 --> 00:26:50.420 do I request data from

NOTE Confidence: 0.9532315  
00:26:50.420 --> 00:26:50.920 JEDT?  
NOTE Confidence: 0.8164302  
00:26:51.540 --> 00:26:52.840 And what we're gonna say,  
NOTE Confidence: 0.9046893  
00:26:53.460 --> 00:26:54.900 again, encourage you to start  
NOTE Confidence: 0.9046893  
00:26:54.900 --> 00:26:56.484 with the self-service tools, such  
NOTE Confidence: 0.9046893  
00:26:56.484 --> 00:26:57.445 as slice or dice it.  
NOTE Confidence: 0.9046893  
00:26:57.445 --> 00:26:59.225 Do do some research, prepare,  
NOTE Confidence: 0.99407536  
00:27:00.005 --> 00:27:01.065 prepare your questions,  
NOTE Confidence: 0.9369752  
00:27:01.445 --> 00:27:02.484 prepare as much of your  
NOTE Confidence: 0.9369752  
00:27:02.484 --> 00:27:03.705 cohort as you can.  
NOTE Confidence: 0.8666803  
00:27:06.085 --> 00:27:07.125 Use the slice or dice  
NOTE Confidence: 0.8666803  
00:27:07.125 --> 00:27:07.705 of tools.  
NOTE Confidence: 0.9892765  
00:27:08.640 --> 00:27:10.400 And, you know, the starting  
NOTE Confidence: 0.9892765  
00:27:10.400 --> 00:27:12.420 point is is is really  
NOTE Confidence: 0.9892765  
00:27:12.480 --> 00:27:12.880 the,  
NOTE Confidence: 0.9679284  
00:27:13.760 --> 00:27:15.840 the the YBIC website. So,  
NOTE Confidence: 0.9679284

00:27:15.840 --> 00:27:17.040 well, thanks for showing that.

NOTE Confidence: 0.9679284

00:27:17.040 --> 00:27:18.580 I'll I'll show you specifically

NOTE Confidence: 0.9679284

00:27:18.640 --> 00:27:19.280 where you can get it.

NOTE Confidence: 0.9679284

00:27:19.280 --> 00:27:19.840 But if you can get

NOTE Confidence: 0.9679284

00:27:19.840 --> 00:27:20.960 to the YBIC website, you

NOTE Confidence: 0.9679284

00:27:20.960 --> 00:27:22.260 can make a data request,

NOTE Confidence: 0.9396044

00:27:22.640 --> 00:27:24.100 through JADA. You can submit,

NOTE Confidence: 0.8767297

00:27:24.585 --> 00:27:25.625 get the link to research

NOTE Confidence: 0.8767297

00:27:25.625 --> 00:27:26.605 of basic access,

NOTE Confidence: 0.8883963

00:27:26.984 --> 00:27:28.984 and hopefully, very quickly get

NOTE Confidence: 0.8883963

00:27:28.984 --> 00:27:29.385 to,

NOTE Confidence: 0.98279476

00:27:29.865 --> 00:27:30.984 you know, the starting part

NOTE Confidence: 0.98279476

00:27:30.984 --> 00:27:31.965 for what you need.

NOTE Confidence: 0.99497944

00:27:32.265 --> 00:27:32.765 Prerequisites

NOTE Confidence: 0.91417575

00:27:33.544 --> 00:27:35.705 for data requests or before

NOTE Confidence: 0.91417575

00:27:35.705 --> 00:27:36.505 at least to get the



NOTE Confidence: 0.91417575

00:27:36.505 --> 00:27:37.950 data is research with basic

NOTE Confidence: 0.91417575

00:27:37.950 --> 00:27:39.070 access. That's gonna give you

NOTE Confidence: 0.91417575

00:27:39.070 --> 00:27:40.190 the tools and the security,

NOTE Confidence: 0.91417575

00:27:40.190 --> 00:27:41.230 so we need to submit

NOTE Confidence: 0.91417575

00:27:41.230 --> 00:27:41.730 that.

NOTE Confidence: 0.9539745

00:27:42.030 --> 00:27:43.070 And if you're looking for

NOTE Confidence: 0.9539745

00:27:43.070 --> 00:27:44.369 data, especially PHI,

NOTE Confidence: 0.99680895

00:27:44.830 --> 00:27:45.710 we will need you to

NOTE Confidence: 0.99680895

00:27:45.710 --> 00:27:47.630 have your compliance documents, your

NOTE Confidence: 0.99680895

00:27:47.630 --> 00:27:49.250 IRB protocol, the approval.

NOTE Confidence: 0.9767047

00:27:49.654 --> 00:27:50.934 If you're if you are

NOTE Confidence: 0.9767047

00:27:50.934 --> 00:27:51.975 planning to release the data,

NOTE Confidence: 0.9767047

00:27:51.975 --> 00:27:53.014 we have a daily work

NOTE Confidence: 0.9767047

00:27:53.095 --> 00:27:54.534 worksheet that will help walk

NOTE Confidence: 0.9767047

00:27:54.534 --> 00:27:55.654 you through the questions to

NOTE Confidence: 0.9767047

00:27:55.654 --> 00:27:56.455 determine if you need a  
NOTE Confidence: 0.9767047

00:27:56.455 --> 00:27:58.154 data use agreement or executive  
NOTE Confidence: 0.9767047

00:27:58.215 --> 00:27:59.674 sponsors to sign off.  
NOTE Confidence: 0.99504364

00:28:00.215 --> 00:28:01.575 Typically, that's only in the  
NOTE Confidence: 0.99504364

00:28:01.575 --> 00:28:02.234 case of  
NOTE Confidence: 0.96734416

00:28:02.659 --> 00:28:03.859 above a certain threshold of  
NOTE Confidence: 0.96734416

00:28:03.859 --> 00:28:05.320 data or if the data  
NOTE Confidence: 0.96734416

00:28:05.539 --> 00:28:06.659 is being requested to lead  
NOTE Confidence: 0.96734416

00:28:06.659 --> 00:28:07.240 the organization.  
NOTE Confidence: 0.9198018

00:28:08.980 --> 00:28:10.740 Now always encourage if you're  
NOTE Confidence: 0.9198018

00:28:10.740 --> 00:28:12.100 working for with our team  
NOTE Confidence: 0.9198018

00:28:12.100 --> 00:28:13.539 to extract the data,  
NOTE Confidence: 0.9824755

00:28:13.859 --> 00:28:14.899 some things to make things  
NOTE Confidence: 0.9824755

00:28:14.899 --> 00:28:16.019 go smoothly for for you  
NOTE Confidence: 0.9824755

00:28:16.019 --> 00:28:16.840 and for us  
NOTE Confidence: 0.9994006

00:28:17.255 --> 00:28:18.875 is to really define

NOTE Confidence: 0.9994426  
00:28:19.175 --> 00:28:20.395 your inclusion criteria  
NOTE Confidence: 0.9667301  
00:28:20.775 --> 00:28:22.135 as much detail as you  
NOTE Confidence: 0.9667301  
00:28:22.135 --> 00:28:23.815 can provide, help us with  
NOTE Confidence: 0.9667301  
00:28:23.815 --> 00:28:24.315 definitions.  
NOTE Confidence: 0.7927809  
00:28:24.935 --> 00:28:25.435 SlicerDicer  
NOTE Confidence: 0.93298906  
00:28:25.735 --> 00:28:26.615 is a great tool to  
NOTE Confidence: 0.93298906  
00:28:26.615 --> 00:28:27.915 do that. So instead of  
NOTE Confidence: 0.93298906  
00:28:28.055 --> 00:28:29.095 telling us you need patients  
NOTE Confidence: 0.93298906  
00:28:29.095 --> 00:28:29.755 with diabetes,  
NOTE Confidence: 0.94562167  
00:28:30.375 --> 00:28:31.095 you might be able to  
NOTE Confidence: 0.94562167  
00:28:31.095 --> 00:28:31.975 tell us about, I need  
NOTE Confidence: 0.94562167  
00:28:31.975 --> 00:28:32.475 these  
NOTE Confidence: 0.99212265  
00:28:33.230 --> 00:28:34.910 ICD ten codes. I need  
NOTE Confidence: 0.99212265  
00:28:34.910 --> 00:28:35.730 these values  
NOTE Confidence: 0.971368  
00:28:36.670 --> 00:28:38.370 of hemoglobin a one c's.  
NOTE Confidence: 0.9737784

00:28:39.070 --> 00:28:40.590 So the more detail you  
NOTE Confidence: 0.9737784

00:28:40.590 --> 00:28:41.790 can provide, the more accurately  
NOTE Confidence: 0.9737784

00:28:41.790 --> 00:28:42.910 and the more quickly we  
NOTE Confidence: 0.9737784

00:28:42.910 --> 00:28:44.370 can assist with with that.  
NOTE Confidence: 0.9888028

00:28:50.715 --> 00:28:52.075 Alright. As I mentioned, this  
NOTE Confidence: 0.9888028

00:28:52.075 --> 00:28:53.295 is the page  
NOTE Confidence: 0.8530686

00:28:53.915 --> 00:28:55.595 on Webex website. It's under  
NOTE Confidence: 0.8530686

00:28:55.595 --> 00:28:57.375 the YNIH data extracts.  
NOTE Confidence: 0.9795988

00:28:58.170 --> 00:28:59.530 And, you know, for the  
NOTE Confidence: 0.9795988

00:28:59.530 --> 00:29:00.670 first step, submitting  
NOTE Confidence: 0.9582979

00:29:01.210 --> 00:29:02.970 your research basic access, the  
NOTE Confidence: 0.9582979

00:29:02.970 --> 00:29:03.930 orange button at the top  
NOTE Confidence: 0.9582979

00:29:03.930 --> 00:29:05.050 will direct you right to  
NOTE Confidence: 0.9582979

00:29:05.050 --> 00:29:06.810 that that link in the  
NOTE Confidence: 0.9582979

00:29:06.810 --> 00:29:08.510 ServiceNow for the health system  
NOTE Confidence: 0.9582979

00:29:08.730 --> 00:29:10.270 to make that request directly.

NOTE Confidence: 0.9582979  
00:29:10.410 --> 00:29:11.530 Again, if you have trouble,  
NOTE Confidence: 0.9582979  
00:29:11.530 --> 00:29:12.745 you can email me. I  
NOTE Confidence: 0.9582979  
00:29:12.745 --> 00:29:14.345 can assist with that. And  
NOTE Confidence: 0.9582979  
00:29:14.345 --> 00:29:15.465 then below it is how  
NOTE Confidence: 0.9582979  
00:29:15.465 --> 00:29:16.585 to submit a research data  
NOTE Confidence: 0.9582979  
00:29:16.585 --> 00:29:17.705 request. That will bring you  
NOTE Confidence: 0.9582979  
00:29:17.705 --> 00:29:18.445 to the,  
NOTE Confidence: 0.9481597  
00:29:18.745 --> 00:29:20.524 the Helix analytics portal,  
NOTE Confidence: 0.96596646  
00:29:20.904 --> 00:29:22.265 which is our request system  
NOTE Confidence: 0.96596646  
00:29:22.265 --> 00:29:24.284 for creating a request.  
NOTE Confidence: 0.96796954  
00:29:29.000 --> 00:29:30.440 So speaking of requests, this  
NOTE Confidence: 0.96796954  
00:29:30.440 --> 00:29:32.280 is the, the research data  
NOTE Confidence: 0.96796954  
00:29:32.280 --> 00:29:33.980 request for the Helix request  
NOTE Confidence: 0.96796954  
00:29:34.280 --> 00:29:34.780 portal.  
NOTE Confidence: 0.9564121  
00:29:35.560 --> 00:29:37.560 All requests, both research as  
NOTE Confidence: 0.9564121

00:29:37.560 --> 00:29:39.100 well as clinical and operational,  
NOTE Confidence: 0.9564121

00:29:39.240 --> 00:29:40.185 come through this.  
NOTE Confidence: 0.98180366

00:29:40.585 --> 00:29:42.105 So there are request types.  
NOTE Confidence: 0.98180366

00:29:42.425 --> 00:29:43.545 This one's prefilled as a  
NOTE Confidence: 0.98180366

00:29:43.545 --> 00:29:45.065 research request type as opposed  
NOTE Confidence: 0.98180366

00:29:45.065 --> 00:29:45.885 to a regular  
NOTE Confidence: 0.8264702

00:29:46.185 --> 00:29:47.485 JADAP data request.  
NOTE Confidence: 0.983174

00:29:48.505 --> 00:29:49.545 We would I would like  
NOTE Confidence: 0.983174

00:29:49.545 --> 00:29:50.425 to point out up in  
NOTE Confidence: 0.983174

00:29:50.425 --> 00:29:51.965 the top left hand corner,  
NOTE Confidence: 0.983174

00:29:52.105 --> 00:29:53.065 it's kinda small, but that's  
NOTE Confidence: 0.983174

00:29:53.065 --> 00:29:54.025 where you can search for  
NOTE Confidence: 0.983174

00:29:54.025 --> 00:29:54.685 the reports.  
NOTE Confidence: 0.93920815

00:29:55.130 --> 00:29:56.570 So by keying in a  
NOTE Confidence: 0.93920815

00:29:56.570 --> 00:29:58.430 subject, I'd, some content,  
NOTE Confidence: 0.9898608

00:29:59.450 --> 00:30:00.810 that's where you'll get every

NOTE Confidence: 0.9898608  
00:30:00.810 --> 00:30:02.330 report that Jada has published  
NOTE Confidence: 0.9898608  
00:30:02.330 --> 00:30:03.150 in the dashboards  
NOTE Confidence: 0.9508334  
00:30:03.530 --> 00:30:04.570 so that you can get  
NOTE Confidence: 0.9508334  
00:30:04.570 --> 00:30:06.330 access to an explorer. So  
NOTE Confidence: 0.9508334  
00:30:06.330 --> 00:30:07.850 if you need inpatient data  
NOTE Confidence: 0.9508334  
00:30:07.850 --> 00:30:09.790 information, you click in inpatient.  
NOTE Confidence: 0.9508334  
00:30:10.035 --> 00:30:10.755 You'll get a list of  
NOTE Confidence: 0.9508334  
00:30:10.755 --> 00:30:12.055 probably a hundred reports,  
NOTE Confidence: 0.9993732  
00:30:12.595 --> 00:30:13.895 as a starting point.  
NOTE Confidence: 0.95163274  
00:30:16.595 --> 00:30:17.475 The rest of the form  
NOTE Confidence: 0.95163274  
00:30:17.475 --> 00:30:18.855 is fairly fairly  
NOTE Confidence: 0.91407037  
00:30:20.195 --> 00:30:21.795 self explanatory. There's a couple  
NOTE Confidence: 0.91407037  
00:30:21.795 --> 00:30:23.075 of key fields. Again, the  
NOTE Confidence: 0.91407037  
00:30:23.075 --> 00:30:24.455 things I would point out,  
NOTE Confidence: 0.91407037  
00:30:24.515 --> 00:30:25.315 again, please,  
NOTE Confidence: 0.8654228

00:30:25.789 --> 00:30:26.750 if you if you're submitting  
NOTE Confidence: 0.8654228

00:30:26.750 --> 00:30:27.570 prep to research,  
NOTE Confidence: 0.9185268

00:30:27.870 --> 00:30:30.270 attach your your your request  
NOTE Confidence: 0.9185268

00:30:30.270 --> 00:30:31.309 form, you know, that your  
NOTE Confidence: 0.9185268

00:30:31.309 --> 00:30:32.130 signed document.  
NOTE Confidence: 0.96292555

00:30:32.590 --> 00:30:33.470 Put a note in there  
NOTE Confidence: 0.96292555

00:30:33.470 --> 00:30:34.929 saying, yes. I'm looking for,  
NOTE Confidence: 0.9754345

00:30:35.549 --> 00:30:36.450 prep to research.  
NOTE Confidence: 0.8782283

00:30:37.149 --> 00:30:38.850 Fill out the description.  
NOTE Confidence: 0.9944916

00:30:39.365 --> 00:30:41.125 Here's the sections there to  
NOTE Confidence: 0.9944916

00:30:41.125 --> 00:30:42.325 put in the criteria that  
NOTE Confidence: 0.9944916

00:30:42.325 --> 00:30:43.525 you're looking for. If you  
NOTE Confidence: 0.9944916

00:30:43.525 --> 00:30:44.665 have complex criteria,  
NOTE Confidence: 0.9823639

00:30:45.365 --> 00:30:46.325 go ahead and attach it.  
NOTE Confidence: 0.9823639

00:30:46.325 --> 00:30:47.365 The button down the bottom  
NOTE Confidence: 0.9823639

00:30:47.365 --> 00:30:48.565 will allow you to attach



NOTE Confidence: 0.9823639  
00:30:48.565 --> 00:30:50.085 forms, and we're also looking  
NOTE Confidence: 0.9823639  
00:30:50.085 --> 00:30:51.445 for you to add attach  
NOTE Confidence: 0.9823639  
00:30:51.445 --> 00:30:53.925 your IRB protocol and, as  
NOTE Confidence: 0.9823639  
00:30:53.925 --> 00:30:56.240 well as your approval letter.  
NOTE Confidence: 0.9954922  
00:31:02.540 --> 00:31:03.420 One last thing. So when  
NOTE Confidence: 0.9954922  
00:31:03.420 --> 00:31:04.460 you submit the request, it's  
NOTE Confidence: 0.9954922  
00:31:04.460 --> 00:31:05.420 gonna give you a request  
NOTE Confidence: 0.9954922  
00:31:05.420 --> 00:31:05.920 number.  
NOTE Confidence: 0.9407258  
00:31:06.540 --> 00:31:08.060 That request is also a  
NOTE Confidence: 0.9407258  
00:31:08.060 --> 00:31:08.560 number.  
NOTE Confidence: 0.9755488  
00:31:08.885 --> 00:31:09.845 If you need to reach  
NOTE Confidence: 0.9755488  
00:31:09.845 --> 00:31:10.965 out to us, please include  
NOTE Confidence: 0.9755488  
00:31:10.965 --> 00:31:12.805 that. We are very project  
NOTE Confidence: 0.9755488  
00:31:12.805 --> 00:31:13.625 number oriented.  
NOTE Confidence: 0.99177057  
00:31:13.925 --> 00:31:15.205 That's how we kinda link  
NOTE Confidence: 0.99177057

00:31:15.205 --> 00:31:16.805 all these things together. So  
NOTE Confidence: 0.99177057

00:31:16.805 --> 00:31:17.845 if you can send that,  
NOTE Confidence: 0.99177057

00:31:17.845 --> 00:31:18.825 that will help us.  
NOTE Confidence: 0.971153

00:31:19.205 --> 00:31:20.645 Additionally, that's the request number  
NOTE Confidence: 0.971153

00:31:20.645 --> 00:31:21.865 that will show up in  
NOTE Confidence: 0.971153

00:31:21.950 --> 00:31:23.150 the my request link. This  
NOTE Confidence: 0.971153

00:31:23.150 --> 00:31:24.590 is everything you submitted to  
NOTE Confidence: 0.971153

00:31:24.590 --> 00:31:25.330 our team,  
NOTE Confidence: 0.9986809

00:31:25.710 --> 00:31:27.390 the status of it, the  
NOTE Confidence: 0.9986809

00:31:27.390 --> 00:31:28.930 comments that we have have  
NOTE Confidence: 0.997537

00:31:29.309 --> 00:31:30.610 added to it as well.  
NOTE Confidence: 0.9877331

00:31:31.150 --> 00:31:32.770 But, additionally, you can  
NOTE Confidence: 0.9879257

00:31:33.150 --> 00:31:34.530 you can also make changes  
NOTE Confidence: 0.9879257

00:31:34.670 --> 00:31:35.330 by adding,  
NOTE Confidence: 0.98605657

00:31:35.710 --> 00:31:37.365 comments of your own and  
NOTE Confidence: 0.98605657

00:31:37.365 --> 00:31:37.865 attaching,

NOTE Confidence: 0.98273164  
00:31:38.405 --> 00:31:40.005 documents. So if we reach  
NOTE Confidence: 0.98273164  
00:31:40.005 --> 00:31:40.965 out, say, by the way,  
NOTE Confidence: 0.98273164  
00:31:41.125 --> 00:31:42.425 we're looking for a particular  
NOTE Confidence: 0.98273164  
00:31:42.485 --> 00:31:43.465 compliance document,  
NOTE Confidence: 0.98126256  
00:31:43.925 --> 00:31:45.365 you can attach it here.  
NOTE Confidence: 0.98126256  
00:31:45.365 --> 00:31:46.165 This is a a way  
NOTE Confidence: 0.98126256  
00:31:46.165 --> 00:31:47.205 to streamline and try and  
NOTE Confidence: 0.98126256  
00:31:47.205 --> 00:31:48.345 get some of these communications  
NOTE Confidence: 0.9983923  
00:31:49.045 --> 00:31:50.105 out of email.  
NOTE Confidence: 0.9943854  
00:31:53.390 --> 00:31:54.590 And this is,  
NOTE Confidence: 0.9631739  
00:31:55.150 --> 00:31:56.190 again, this I guess this  
NOTE Confidence: 0.9631739  
00:31:56.190 --> 00:31:57.630 presentation will be shared, but  
NOTE Confidence: 0.9631739  
00:31:57.630 --> 00:31:58.670 here are all the links  
NOTE Confidence: 0.9631739  
00:31:58.670 --> 00:31:59.630 to the things I've I've  
NOTE Confidence: 0.9631739  
00:31:59.630 --> 00:32:00.370 talked about,  
NOTE Confidence: 0.935293

00:32:00.830 --> 00:32:02.610 hopefully, for for easy access,

NOTE Confidence: 0.9990989

00:32:03.230 --> 00:32:04.370 and for more reference.

NOTE Confidence: 0.96952724

00:32:06.135 --> 00:32:07.095 And that's all I have

NOTE Confidence: 0.96952724

00:32:07.095 --> 00:32:08.295 for today. I'm happy to

NOTE Confidence: 0.96952724

00:32:08.295 --> 00:32:09.275 take any questions

NOTE Confidence: 0.9684817

00:32:09.575 --> 00:32:11.015 either now or via email

NOTE Confidence: 0.9684817

00:32:11.015 --> 00:32:11.995 as they come up.

NOTE Confidence: 0.76975745

00:32:23.080 --> 00:32:23.580 Yes.

NOTE Confidence: 0.3743771

00:32:24.360 --> 00:32:24.860 So,

NOTE Confidence: 0.6791795

00:32:26.360 --> 00:32:27.799 we don't have this question

NOTE Confidence: 0.6791795

00:32:27.799 --> 00:32:28.920 at your mention. We have

NOTE Confidence: 0.6791795

00:32:28.920 --> 00:32:30.679 a download have a data

NOTE Confidence: 0.6791795

00:32:30.679 --> 00:32:31.900 set. Right? And

NOTE Confidence: 0.24007516

00:32:32.415 --> 00:32:32.915 if

NOTE Confidence: 0.67395604

00:32:38.617 --> 00:32:39.117 we

NOTE Confidence: 0.5856229

00:32:45.700 --> 00:32:46.200 disseminate

NOTE Confidence: 0.21163  
00:32:47.779 --> 00:32:48.279 the.  
NOTE Confidence: 0.92189604  
00:32:49.460 --> 00:32:51.299 Yeah. Yeah. It it's not  
NOTE Confidence: 0.92189604  
00:32:51.299 --> 00:32:52.200 as straightforward.  
NOTE Confidence: 0.94845444  
00:32:52.580 --> 00:32:53.860 That's that's a great question.  
NOTE Confidence: 0.94845444  
00:32:53.860 --> 00:32:54.899 You know, part of it  
NOTE Confidence: 0.94845444  
00:32:54.899 --> 00:32:55.880 is going to be  
NOTE Confidence: 0.9719851  
00:32:57.055 --> 00:32:58.575 where it's being disseminated to.  
NOTE Confidence: 0.9719851  
00:32:58.575 --> 00:32:59.855 Even if it's de identified,  
NOTE Confidence: 0.9719851  
00:32:59.855 --> 00:33:01.135 if it's leaving the organization,  
NOTE Confidence: 0.9719851  
00:33:01.135 --> 00:33:02.655 it's going to have some  
NOTE Confidence: 0.9719851  
00:33:02.655 --> 00:33:03.635 review by compliance.  
NOTE Confidence: 0.9935649  
00:33:04.655 --> 00:33:05.155 Sometimes,  
NOTE Confidence: 0.97039074  
00:33:05.535 --> 00:33:06.495 you know, again, is it  
NOTE Confidence: 0.97039074  
00:33:06.495 --> 00:33:07.855 de identified to safe harbor  
NOTE Confidence: 0.97039074  
00:33:07.855 --> 00:33:09.635 methods? What's in your data?  
NOTE Confidence: 0.9541125

00:33:10.000 --> 00:33:11.039 What are you sharing? Sometimes

NOTE Confidence: 0.9541125

00:33:11.039 --> 00:33:12.559 the imaging data falls into

NOTE Confidence: 0.9541125

00:33:12.559 --> 00:33:13.620 that. So,

NOTE Confidence: 0.8926512

00:33:14.400 --> 00:33:15.919 I can help advise on

NOTE Confidence: 0.8926512

00:33:15.919 --> 00:33:16.720 those on a case by

NOTE Confidence: 0.8926512

00:33:16.720 --> 00:33:17.840 case level, but we still

NOTE Confidence: 0.8926512

00:33:17.840 --> 00:33:19.200 work with the IT office

NOTE Confidence: 0.8926512

00:33:19.200 --> 00:33:19.860 on that.

NOTE Confidence: 0.66298664

00:33:30.645 --> 00:33:32.085 What batch of modem will

NOTE Confidence: 0.66298664

00:33:32.085 --> 00:33:32.745 be there?

NOTE Confidence: 0.9649211

00:33:33.365 --> 00:33:34.804 You'll need, at least a

NOTE Confidence: 0.9649211

00:33:34.804 --> 00:33:36.025 YNHH ID.

NOTE Confidence: 0.9637063

00:33:36.510 --> 00:33:37.630 So if you don't already

NOTE Confidence: 0.9637063

00:33:37.630 --> 00:33:39.070 have that, you know, research

NOTE Confidence: 0.9637063

00:33:39.070 --> 00:33:40.510 your basic access request, we'll

NOTE Confidence: 0.9637063

00:33:40.510 --> 00:33:41.470 help we'll get that for

NOTE Confidence: 0.9637063  
00:33:41.470 --> 00:33:41.970 you.  
NOTE Confidence: 0.3466119  
00:33:49.424 --> 00:33:49.924 Thank  
NOTE Confidence: 0.9846377  
00:33:51.424 --> 00:33:51.924 you  
NOTE Confidence: 0.8922684  
00:33:53.424 --> 00:33:53.924 very  
NOTE Confidence: 0.9985074  
00:33:55.424 --> 00:33:55.924 much.  
NOTE Confidence: 0.9410089  
00:33:57.424 --> 00:33:58.325 Thanks, Rich.  
NOTE Confidence: 0.9647908  
00:33:59.745 --> 00:34:01.105 We'll move to the next  
NOTE Confidence: 0.9647908  
00:34:01.105 --> 00:34:01.605 speaker.  
NOTE Confidence: 0.9135807  
00:34:02.630 --> 00:34:04.090 Nate is gonna talk about,  
NOTE Confidence: 0.56412804  
00:34:04.790 --> 00:34:05.290 ChipSafe  
NOTE Confidence: 0.96833175  
00:34:05.910 --> 00:34:07.830 computational health platform. Nate, if  
NOTE Confidence: 0.96833175  
00:34:07.830 --> 00:34:09.270 you could introduce yourself and  
NOTE Confidence: 0.96833175  
00:34:09.270 --> 00:34:10.010 then start.  
NOTE Confidence: 0.801229  
00:34:10.310 --> 00:34:11.210 Thank you.  
NOTE Confidence: 0.9887449  
00:34:14.905 --> 00:34:16.905 Hi, everyone. I'm Nate Price.  
NOTE Confidence: 0.92152786

00:34:17.305 --> 00:34:18.665 I've been with the Yale  
NOTE Confidence: 0.92152786

00:34:18.665 --> 00:34:19.885 New Haven Health System  
NOTE Confidence: 0.98495936

00:34:20.425 --> 00:34:21.865 since we were just a  
NOTE Confidence: 0.98495936

00:34:21.865 --> 00:34:22.365 hospital.  
NOTE Confidence: 0.9690793

00:34:23.465 --> 00:34:23.945 And,  
NOTE Confidence: 0.9775918

00:34:24.265 --> 00:34:25.465 back in the back in  
NOTE Confidence: 0.9775918

00:34:25.465 --> 00:34:27.085 the beginning, I was just,  
NOTE Confidence: 0.97672856

00:34:27.760 --> 00:34:29.040 an engineer working with a  
NOTE Confidence: 0.97672856

00:34:29.040 --> 00:34:30.400 bunch of like minded nerds  
NOTE Confidence: 0.97672856

00:34:30.400 --> 00:34:31.440 in the department of lab  
NOTE Confidence: 0.97672856

00:34:31.440 --> 00:34:31.940 medicine.  
NOTE Confidence: 0.83999074

00:34:32.480 --> 00:34:34.880 I joined Charley Torrey's Helix  
NOTE Confidence: 0.83999074

00:34:34.880 --> 00:34:35.620 data science,  
NOTE Confidence: 0.9936234

00:34:36.720 --> 00:34:37.780 group about  
NOTE Confidence: 0.9309263

00:34:38.239 --> 00:34:40.000 seven years ago now. And,  
NOTE Confidence: 0.9359032

00:34:41.235 --> 00:34:42.035 so we've done a lot



NOTE Confidence: 0.9359032

00:34:42.035 --> 00:34:43.075 of great work since then.

NOTE Confidence: 0.9359032

00:34:43.075 --> 00:34:44.675 We've developed some cool stuff,

NOTE Confidence: 0.9359032

00:34:44.675 --> 00:34:45.175 and,

NOTE Confidence: 0.9996455

00:34:45.555 --> 00:34:46.215 we're enjoying

NOTE Confidence: 0.8944206

00:34:46.755 --> 00:34:48.595 post collaboration with our colleagues

NOTE Confidence: 0.8944206

00:34:48.595 --> 00:34:49.255 in in,

NOTE Confidence: 0.7705756

00:34:50.035 --> 00:34:51.235 bids and and and why

NOTE Confidence: 0.7705756

00:34:51.235 --> 00:34:51.735 that.

NOTE Confidence: 0.80779827

00:34:55.440 --> 00:34:55.940 Let's

NOTE Confidence: 0.74630815

00:34:57.839 --> 00:34:58.339 see.

NOTE Confidence: 0.83795786

00:34:59.839 --> 00:35:01.619 Yeah. First, we're working here.

NOTE Confidence: 0.90365237

00:35:03.200 --> 00:35:04.020 There we go.

NOTE Confidence: 0.9634864

00:35:07.455 --> 00:35:08.335 Before I get into a

NOTE Confidence: 0.9634864

00:35:08.335 --> 00:35:09.135 lot of tech stuff, I

NOTE Confidence: 0.9634864

00:35:09.135 --> 00:35:10.015 wanted to take you back

NOTE Confidence: 0.9634864

00:35:10.015 --> 00:35:10.995 nearly a century,  
NOTE Confidence: 0.9915215

00:35:11.855 --> 00:35:13.075 and share with you,  
NOTE Confidence: 0.9944989

00:35:14.015 --> 00:35:15.375 my favorite quotation of all  
NOTE Confidence: 0.9944989

00:35:15.375 --> 00:35:15.875 time.  
NOTE Confidence: 0.9869157

00:35:17.055 --> 00:35:18.335 I'm gonna I can't resist  
NOTE Confidence: 0.9869157

00:35:18.335 --> 00:35:19.635 reading the entire thing.  
NOTE Confidence: 0.9905126

00:35:20.070 --> 00:35:21.610 It is the, introduction  
NOTE Confidence: 0.842434

00:35:21.910 --> 00:35:23.050 to AA Mills'  
NOTE Confidence: 0.98722315

00:35:23.430 --> 00:35:24.810 classic Winnie the Pooh.  
NOTE Confidence: 0.9421875

00:35:25.270 --> 00:35:26.870 Here is Edward Bair coming  
NOTE Confidence: 0.9421875

00:35:26.870 --> 00:35:29.450 downstairs now. Bump. Bump. Bump.  
NOTE Confidence: 0.9421875

00:35:29.590 --> 00:35:30.469 On the back of his  
NOTE Confidence: 0.9421875

00:35:30.469 --> 00:35:32.410 head behind Christopher Robin.  
NOTE Confidence: 0.972028

00:35:32.825 --> 00:35:34.025 It is, as far as  
NOTE Confidence: 0.972028

00:35:34.025 --> 00:35:35.545 he knows, the only way  
NOTE Confidence: 0.972028

00:35:35.545 --> 00:35:37.725 of coming downstairs, but sometimes

NOTE Confidence: 0.972028  
00:35:37.865 --> 00:35:39.145 he feels that there really  
NOTE Confidence: 0.972028  
00:35:39.145 --> 00:35:40.745 is another way if only  
NOTE Confidence: 0.972028  
00:35:40.745 --> 00:35:42.105 he could stop bumping for  
NOTE Confidence: 0.972028  
00:35:42.105 --> 00:35:43.065 a moment and think of  
NOTE Confidence: 0.972028  
00:35:43.065 --> 00:35:43.565 it.  
NOTE Confidence: 0.9730852  
00:35:44.745 --> 00:35:45.565 And I feel,  
NOTE Confidence: 0.99239683  
00:35:46.265 --> 00:35:46.890 I don't know about you,  
NOTE Confidence: 0.99239683  
00:35:46.890 --> 00:35:47.849 but I feel I feel  
NOTE Confidence: 0.99239683  
00:35:47.849 --> 00:35:48.650 like that's sort of the  
NOTE Confidence: 0.99239683  
00:35:48.650 --> 00:35:49.609 story of my life. I  
NOTE Confidence: 0.99239683  
00:35:49.609 --> 00:35:51.770 think we often get stuck  
NOTE Confidence: 0.99239683  
00:35:51.770 --> 00:35:53.130 in ways of doing things  
NOTE Confidence: 0.99239683  
00:35:53.130 --> 00:35:54.190 that are not ideal,  
NOTE Confidence: 0.9950935  
00:35:55.130 --> 00:35:56.569 but we're too much in  
NOTE Confidence: 0.9950935  
00:35:56.569 --> 00:35:57.450 the middle of it to  
NOTE Confidence: 0.9950935

00:35:57.450 --> 00:35:58.489 step back and think of  
NOTE Confidence: 0.9950935

00:35:58.489 --> 00:35:59.630 a of a better way.  
NOTE Confidence: 0.9514395

00:36:01.035 --> 00:36:01.515 But,  
NOTE Confidence: 0.82881385

00:36:01.835 --> 00:36:03.855 the the, ChipSafe platform,  
NOTE Confidence: 0.97624093

00:36:04.395 --> 00:36:05.915 is a way of help  
NOTE Confidence: 0.97624093

00:36:05.994 --> 00:36:07.114 helping us to keep from  
NOTE Confidence: 0.97624093

00:36:07.114 --> 00:36:08.875 bumping our heads. Like, if  
NOTE Confidence: 0.97624093

00:36:08.875 --> 00:36:09.994 you've been trying to do  
NOTE Confidence: 0.97624093

00:36:09.994 --> 00:36:11.855 data science on your laptop  
NOTE Confidence: 0.97624093

00:36:12.075 --> 00:36:13.435 and its compute power, that's  
NOTE Confidence: 0.97624093

00:36:13.435 --> 00:36:14.415 kind of a bump.  
NOTE Confidence: 0.95740783

00:36:15.260 --> 00:36:16.300 Trying to figure out where  
NOTE Confidence: 0.95740783

00:36:16.300 --> 00:36:18.000 to get large datasets from  
NOTE Confidence: 0.9349135

00:36:18.619 --> 00:36:19.739 could be a bump. You  
NOTE Confidence: 0.9349135

00:36:19.739 --> 00:36:21.920 need GPU com compute power.  
NOTE Confidence: 0.9680079

00:36:23.020 --> 00:36:24.460 On your own, that's that's

NOTE Confidence: 0.9680079  
00:36:24.460 --> 00:36:25.260 kind of a bump.  
NOTE Confidence: 0.994909  
00:36:25.660 --> 00:36:26.780 And if you're trying to  
NOTE Confidence: 0.994909  
00:36:26.780 --> 00:36:27.819 do stuff on your own  
NOTE Confidence: 0.994909  
00:36:27.819 --> 00:36:28.859 in a compliant way, that's  
NOTE Confidence: 0.994909  
00:36:28.859 --> 00:36:29.760 a huge bump.  
NOTE Confidence: 0.99621916  
00:36:31.715 --> 00:36:33.575 So this is why we  
NOTE Confidence: 0.97034127  
00:36:34.035 --> 00:36:35.395 have CHIP and SAFE. CHIP,  
NOTE Confidence: 0.97034127  
00:36:35.395 --> 00:36:37.094 of course, stands for computational  
NOTE Confidence: 0.97034127  
00:36:37.235 --> 00:36:37.975 health platform.  
NOTE Confidence: 0.9592913  
00:36:39.075 --> 00:36:40.915 SAFE is the secure, aligned,  
NOTE Confidence: 0.9592913  
00:36:40.915 --> 00:36:41.975 flexible environment,  
NOTE Confidence: 0.9755961  
00:36:44.289 --> 00:36:46.049 which, you know, really, they  
NOTE Confidence: 0.9755961  
00:36:46.049 --> 00:36:47.089 they they mean they mean  
NOTE Confidence: 0.9755961  
00:36:47.089 --> 00:36:47.910 the same thing.  
NOTE Confidence: 0.9985644  
00:36:49.410 --> 00:36:50.770 There's a lot to unpack  
NOTE Confidence: 0.9985644

00:36:50.770 --> 00:36:51.589 in this environment.  
NOTE Confidence: 0.9950886

00:36:52.930 --> 00:36:53.989 Let me just  
NOTE Confidence: 0.927067

00:36:54.930 --> 00:36:56.210 wanna see if I can  
NOTE Confidence: 0.927067

00:36:56.210 --> 00:36:56.710 get,  
NOTE Confidence: 0.97318804

00:36:58.505 --> 00:36:59.465 can I get the laser  
NOTE Confidence: 0.97318804

00:36:59.465 --> 00:37:00.364 pointer working,  
NOTE Confidence: 0.9100686

00:37:06.345 --> 00:37:07.225 Yeah? I don't see that.  
NOTE Confidence: 0.9100686

00:37:07.225 --> 00:37:08.345 I don't see the cursor  
NOTE Confidence: 0.9100686

00:37:08.345 --> 00:37:09.545 there. Oh, here's my oh,  
NOTE Confidence: 0.9100686

00:37:09.545 --> 00:37:10.745 finally got my cursor. Okay.  
NOTE Confidence: 0.9100686

00:37:10.745 --> 00:37:11.565 Thank you.  
NOTE Confidence: 0.78601056

00:37:11.890 --> 00:37:13.830 Great. Yep. I'll  
NOTE Confidence: 0.83806944

00:37:14.290 --> 00:37:15.190 get that done.  
NOTE Confidence: 0.911307

00:37:15.489 --> 00:37:17.489 Yes. There's a pointer. Okay.  
NOTE Confidence: 0.911307

00:37:17.489 --> 00:37:18.230 Thank you.  
NOTE Confidence: 0.99207747

00:37:19.489 --> 00:37:20.850 Alright. I'm gonna work from

NOTE Confidence: 0.99207747  
00:37:20.850 --> 00:37:21.810 the bottom and sort of,  
NOTE Confidence: 0.92056924  
00:37:22.530 --> 00:37:23.810 go in not not exactly  
NOTE Confidence: 0.92056924  
00:37:23.810 --> 00:37:25.330 the top, top to bottom,  
NOTE Confidence: 0.92056924  
00:37:25.489 --> 00:37:27.010 way this diagram is organized.  
NOTE Confidence: 0.92056924  
00:37:27.010 --> 00:37:28.615 But, you know, we have  
NOTE Confidence: 0.92056924  
00:37:28.615 --> 00:37:29.915 a great deal of storage,  
NOTE Confidence: 0.9130521  
00:37:31.495 --> 00:37:32.555 which we'll detail  
NOTE Confidence: 0.99421185  
00:37:32.935 --> 00:37:35.015 shortly. We have both sort  
NOTE Confidence: 0.99421185  
00:37:35.015 --> 00:37:35.595 of hot,  
NOTE Confidence: 0.9860671  
00:37:37.015 --> 00:37:39.015 SSD storage and, and a  
NOTE Confidence: 0.9860671  
00:37:39.015 --> 00:37:40.295 lot and a great deal  
NOTE Confidence: 0.9860671  
00:37:40.295 --> 00:37:42.410 of of cold storage via,  
NOTE Confidence: 0.9833128  
00:37:43.030 --> 00:37:43.530 NetApp  
NOTE Confidence: 0.9038406  
00:37:43.989 --> 00:37:45.450 and the CompRise application.  
NOTE Confidence: 0.90045965  
00:37:47.270 --> 00:37:48.329 In terms of computation,  
NOTE Confidence: 0.98960143

00:37:48.630 --> 00:37:50.329 we have a huge computational  
NOTE Confidence: 0.98960143

00:37:50.469 --> 00:37:50.969 array,  
NOTE Confidence: 0.9946184

00:37:51.430 --> 00:37:53.109 by Nutanix that provides us  
NOTE Confidence: 0.9946184

00:37:53.109 --> 00:37:54.630 all of the CPUs and  
NOTE Confidence: 0.9946184

00:37:54.630 --> 00:37:56.089 the and the memory used  
NOTE Confidence: 0.9946184

00:37:56.255 --> 00:37:57.525 to spin up the many,  
NOTE Confidence: 0.9946184

00:37:57.525 --> 00:37:59.395 many, VMs that comprise  
NOTE Confidence: 0.9956428

00:38:00.255 --> 00:38:01.955 the computational health platform.  
NOTE Confidence: 0.94532603

00:38:03.215 --> 00:38:04.195 We also have,  
NOTE Confidence: 0.89248705

00:38:05.455 --> 00:38:06.815 a a significant and growing  
NOTE Confidence: 0.89248705

00:38:06.815 --> 00:38:07.955 number of GPUs,  
NOTE Confidence: 0.99962866

00:38:08.655 --> 00:38:09.155 both  
NOTE Confidence: 0.8959304

00:38:09.950 --> 00:38:11.410 NVIDIA and and Tesla.  
NOTE Confidence: 0.9699142

00:38:13.869 --> 00:38:14.750 We're gonna take a look  
NOTE Confidence: 0.9699142

00:38:14.750 --> 00:38:15.390 at this little,  
NOTE Confidence: 0.98505276

00:38:15.950 --> 00:38:17.469 ship's wheel symbol here. That



NOTE Confidence: 0.98505276  
00:38:17.469 --> 00:38:18.849 is the symbol for Kubernetes,  
NOTE Confidence: 0.98505276  
00:38:19.069 --> 00:38:20.269 which is a Greek word  
NOTE Confidence: 0.98505276  
00:38:20.269 --> 00:38:20.750 that,  
NOTE Confidence: 0.9651356  
00:38:21.469 --> 00:38:23.489 originally means governor or helmsman.  
NOTE Confidence: 0.9119452  
00:38:25.335 --> 00:38:26.155 It is  
NOTE Confidence: 0.9805622  
00:38:27.175 --> 00:38:28.935 the helmsman that kind of  
NOTE Confidence: 0.9805622  
00:38:28.935 --> 00:38:30.135 steers a lot of what  
NOTE Confidence: 0.9805622  
00:38:30.135 --> 00:38:31.195 goes on in Chip.  
NOTE Confidence: 0.99904984  
00:38:31.495 --> 00:38:33.094 It is a platform for  
NOTE Confidence: 0.99904984  
00:38:33.094 --> 00:38:33.594 orchestrating  
NOTE Confidence: 0.98774004  
00:38:33.895 --> 00:38:36.135 container based applications, which is  
NOTE Confidence: 0.98774004  
00:38:36.135 --> 00:38:37.515 pretty much all of Chip.  
NOTE Confidence: 0.9716793  
00:38:38.950 --> 00:38:41.030 It makes applications scalable and  
NOTE Confidence: 0.9716793  
00:38:41.030 --> 00:38:41.850 fault tolerant.  
NOTE Confidence: 0.92190564  
00:38:42.310 --> 00:38:43.050 It allows,  
NOTE Confidence: 0.9849439

00:38:44.390 --> 00:38:46.469 applications to add more compute

NOTE Confidence: 0.9849439

00:38:46.469 --> 00:38:48.150 power or take some away

NOTE Confidence: 0.9849439

00:38:48.150 --> 00:38:49.530 depending on what's needed.

NOTE Confidence: 0.98160285

00:38:52.465 --> 00:38:53.265 And a lot of the

NOTE Confidence: 0.98160285

00:38:53.265 --> 00:38:54.545 other, many of the other

NOTE Confidence: 0.98160285

00:38:54.545 --> 00:38:55.905 components you'll you'll you'll see

NOTE Confidence: 0.98160285

00:38:55.905 --> 00:38:56.864 in more detail in,

NOTE Confidence: 0.99805117

00:38:57.344 --> 00:38:58.325 upcoming slides.

NOTE Confidence: 0.92508554

00:38:58.864 --> 00:38:59.925 And then Kamino

NOTE Confidence: 0.95887804

00:39:00.305 --> 00:39:01.505 up here is, of course,

NOTE Confidence: 0.95887804

00:39:01.505 --> 00:39:02.465 a key part of Chip,

NOTE Confidence: 0.95887804

00:39:02.465 --> 00:39:03.505 and I'm gonna tell you

NOTE Confidence: 0.95887804

00:39:03.505 --> 00:39:04.545 a lot more about that

NOTE Confidence: 0.95887804

00:39:04.545 --> 00:39:05.045 shortly.

NOTE Confidence: 0.98681355

00:39:06.339 --> 00:39:07.380 Gonna take a quick look

NOTE Confidence: 0.98681355

00:39:07.380 --> 00:39:08.660 at our data assets over

NOTE Confidence: 0.98681355  
00:39:08.660 --> 00:39:09.160 here.  
NOTE Confidence: 0.9973219  
00:39:10.180 --> 00:39:12.020 We do have genomic data  
NOTE Confidence: 0.9973219  
00:39:12.020 --> 00:39:12.520 in,  
NOTE Confidence: 0.98963517  
00:39:12.900 --> 00:39:14.260 in Chip in the form  
NOTE Confidence: 0.98963517  
00:39:14.260 --> 00:39:14.760 of,  
NOTE Confidence: 0.99451005  
00:39:15.140 --> 00:39:16.200 DCF data  
NOTE Confidence: 0.92746955  
00:39:16.660 --> 00:39:17.160 from,  
NOTE Confidence: 0.63791806  
00:39:17.700 --> 00:39:18.200 ACTX,  
NOTE Confidence: 0.9346712  
00:39:18.545 --> 00:39:19.745 from the act from ACTEX  
NOTE Confidence: 0.9346712  
00:39:19.745 --> 00:39:22.165 patients and the generations project.  
NOTE Confidence: 0.99367625  
00:39:24.145 --> 00:39:25.825 As Rich has described, we  
NOTE Confidence: 0.99367625  
00:39:25.825 --> 00:39:27.285 have the EHR,  
NOTE Confidence: 0.88737935  
00:39:27.985 --> 00:39:29.364 in OMOP format.  
NOTE Confidence: 0.94578195  
00:39:29.825 --> 00:39:31.665 We have real time EHR  
NOTE Confidence: 0.94578195  
00:39:31.665 --> 00:39:33.025 data in terms of some,  
NOTE Confidence: 0.94578195

00:39:33.270 --> 00:39:34.550 we have some HL seven  
NOTE Confidence: 0.94578195

00:39:34.550 --> 00:39:35.530 feeds that are,  
NOTE Confidence: 0.9991047

00:39:36.150 --> 00:39:36.650 updating  
NOTE Confidence: 0.97528505

00:39:36.950 --> 00:39:37.770 things like,  
NOTE Confidence: 0.96236384

00:39:38.630 --> 00:39:40.790 ADT information, lab results. We  
NOTE Confidence: 0.96236384

00:39:40.790 --> 00:39:41.450 can actually  
NOTE Confidence: 0.99966705

00:39:41.750 --> 00:39:43.050 have that stuff available  
NOTE Confidence: 0.96452266

00:39:43.910 --> 00:39:45.270 faster than it's available in  
NOTE Confidence: 0.96452266

00:39:45.270 --> 00:39:47.050 OMOP depending on the application.  
NOTE Confidence: 0.9727889

00:39:47.825 --> 00:39:49.425 We have high speed bed  
NOTE Confidence: 0.9727889

00:39:49.425 --> 00:39:50.705 monitor and vent data with,  
NOTE Confidence: 0.9727889

00:39:50.705 --> 00:39:52.465 like I don't know. We've  
NOTE Confidence: 0.9727889

00:39:52.545 --> 00:39:53.745 we we stopped counting the  
NOTE Confidence: 0.9727889

00:39:53.745 --> 00:39:54.945 number of billions of data  
NOTE Confidence: 0.9727889

00:39:54.945 --> 00:39:56.065 points per month that we're  
NOTE Confidence: 0.9727889

00:39:56.065 --> 00:39:56.565 ingesting,

NOTE Confidence: 0.98198414  
00:39:57.265 --> 00:39:58.645 but we're getting bed monitors,  
NOTE Confidence: 0.98198414  
00:39:58.705 --> 00:40:00.245 vents, anesthesia data,  
NOTE Confidence: 0.9447136  
00:40:00.625 --> 00:40:02.245 in real time into chip.  
NOTE Confidence: 0.95485675  
00:40:04.280 --> 00:40:05.960 There's clinical data I I  
NOTE Confidence: 0.95485675  
00:40:05.960 --> 00:40:07.400 won't go into too much  
NOTE Confidence: 0.95485675  
00:40:07.400 --> 00:40:08.200 detail about a lot of  
NOTE Confidence: 0.95485675  
00:40:08.200 --> 00:40:09.880 these things. I will mention  
NOTE Confidence: 0.95485675  
00:40:09.880 --> 00:40:11.160 that you that there is  
NOTE Confidence: 0.95485675  
00:40:11.160 --> 00:40:12.920 BYO capability that if you  
NOTE Confidence: 0.95485675  
00:40:12.920 --> 00:40:14.140 need compute power,  
NOTE Confidence: 0.9151987  
00:40:14.440 --> 00:40:15.580 but you have a dataset,  
NOTE Confidence: 0.98858887  
00:40:16.215 --> 00:40:17.335 of your own that you  
NOTE Confidence: 0.98858887  
00:40:17.335 --> 00:40:18.215 want to work on, it's  
NOTE Confidence: 0.98858887  
00:40:18.215 --> 00:40:19.335 possible to bring your own  
NOTE Confidence: 0.98858887  
00:40:19.335 --> 00:40:20.315 data to chip.  
NOTE Confidence: 0.98730195

00:40:20.695 --> 00:40:21.495 And then, of course, we  
NOTE Confidence: 0.98730195

00:40:21.495 --> 00:40:23.255 have LLMs, which is really  
NOTE Confidence: 0.98730195

00:40:23.255 --> 00:40:24.375 the primary reason we're all  
NOTE Confidence: 0.98730195

00:40:24.375 --> 00:40:25.275 here this afternoon.  
NOTE Confidence: 0.97933185

00:40:32.020 --> 00:40:33.380 In Hitchhiker's Guide to the  
NOTE Confidence: 0.97933185

00:40:33.380 --> 00:40:35.239 Galaxy, Douglas Adams said,  
NOTE Confidence: 0.9956587

00:40:36.180 --> 00:40:37.560 space is big.  
NOTE Confidence: 0.96760106

00:40:38.180 --> 00:40:39.380 You just won't believe how  
NOTE Confidence: 0.96760106

00:40:39.380 --> 00:40:41.219 hugely mind bogglingly big it  
NOTE Confidence: 0.96760106

00:40:41.219 --> 00:40:42.494 is. I mean, you might  
NOTE Confidence: 0.96760106

00:40:42.494 --> 00:40:43.454 think it's a long way  
NOTE Confidence: 0.96760106

00:40:43.454 --> 00:40:44.255 down the road to the  
NOTE Confidence: 0.96760106

00:40:44.255 --> 00:40:44.755 chemist,  
NOTE Confidence: 0.99866533

00:40:45.375 --> 00:40:46.734 but that's just peanuts to  
NOTE Confidence: 0.99866533

00:40:46.734 --> 00:40:47.234 space.  
NOTE Confidence: 0.9495237

00:40:47.694 --> 00:40:49.295 Now we have not made

NOTE Confidence: 0.9495237

00:40:49.295 --> 00:40:50.654 our environment quite as big

NOTE Confidence: 0.9495237

00:40:50.654 --> 00:40:52.094 as space, but we've made

NOTE Confidence: 0.9495237

00:40:52.094 --> 00:40:52.414 it,

NOTE Confidence: 0.9883415

00:40:53.214 --> 00:40:54.974 pretty large, and it's continuing

NOTE Confidence: 0.9883415

00:40:54.974 --> 00:40:56.355 to grow as our user

NOTE Confidence: 0.9893705

00:40:56.700 --> 00:40:58.859 requirements and application requirements do

NOTE Confidence: 0.9893705

00:40:58.859 --> 00:40:59.359 too.

NOTE Confidence: 0.95818186

00:41:00.540 --> 00:41:01.580 Just a few of these

NOTE Confidence: 0.95818186

00:41:01.580 --> 00:41:02.960 numbers. We have,

NOTE Confidence: 0.9755412

00:41:03.980 --> 00:41:05.820 fourteen over fourteen hundred CPU

NOTE Confidence: 0.9755412

00:41:05.820 --> 00:41:06.640 cores available.

NOTE Confidence: 0.9716739

00:41:06.940 --> 00:41:08.060 About half of them are

NOTE Confidence: 0.9716739

00:41:08.060 --> 00:41:09.200 currently in use.

NOTE Confidence: 0.942484

00:41:10.194 --> 00:41:12.295 Nearly thirteen terabytes of memory.

NOTE Confidence: 0.99104404

00:41:13.954 --> 00:41:15.555 In terms of storage, we've

NOTE Confidence: 0.99104404

00:41:15.555 --> 00:41:17.474 got two tiers of fast  
NOTE Confidence: 0.99104404

00:41:17.474 --> 00:41:19.175 storage that total,  
NOTE Confidence: 0.98753375

00:41:20.035 --> 00:41:20.994 over four hundred,  
NOTE Confidence: 0.93337464

00:41:21.395 --> 00:41:22.515 well, four hundred and sixteen  
NOTE Confidence: 0.93337464

00:41:22.515 --> 00:41:23.015 terabytes.  
NOTE Confidence: 0.98368657

00:41:23.750 --> 00:41:25.349 We have a storage grid  
NOTE Confidence: 0.98368657

00:41:25.349 --> 00:41:27.030 for colder storage that contains  
NOTE Confidence: 0.98368657

00:41:27.030 --> 00:41:28.170 seven hundred terabytes.  
NOTE Confidence: 0.95082414

00:41:29.190 --> 00:41:31.690 And there's a, storage management  
NOTE Confidence: 0.95082414

00:41:31.750 --> 00:41:33.670 application called CompRise that that  
NOTE Confidence: 0.95082414

00:41:33.670 --> 00:41:35.109 handles the transfer of data  
NOTE Confidence: 0.95082414

00:41:35.109 --> 00:41:36.650 between hot and cold.  
NOTE Confidence: 0.9407897

00:41:38.495 --> 00:41:40.195 GPUs, which, of course, everyone's  
NOTE Confidence: 0.9407897

00:41:40.335 --> 00:41:41.875 very interested in, we have,  
NOTE Confidence: 0.98860556

00:41:43.455 --> 00:41:43.955 sixteen  
NOTE Confidence: 0.87411547

00:41:44.655 --> 00:41:45.155 Tesla,



NOTE Confidence: 0.97375214  
00:41:46.415 --> 00:41:48.895 GPUs altogether, two Tesla cards  
NOTE Confidence: 0.97375214  
00:41:48.895 --> 00:41:50.710 of eight each. We have,  
NOTE Confidence: 0.96510285  
00:41:51.170 --> 00:41:52.849 eight currently, we have eight  
NOTE Confidence: 0.96510285  
00:41:52.849 --> 00:41:54.289 NVIDIA a one hundreds and  
NOTE Confidence: 0.96510285  
00:41:54.289 --> 00:41:55.029 eight NVIDIA,  
NOTE Confidence: 0.9646027  
00:41:56.130 --> 00:41:57.029 h one hundreds.  
NOTE Confidence: 0.99594367  
00:41:57.410 --> 00:41:58.450 And I think that number  
NOTE Confidence: 0.99594367  
00:41:58.450 --> 00:41:59.969 is expected to grow as  
NOTE Confidence: 0.99594367  
00:41:59.969 --> 00:42:01.730 we, as we as we  
NOTE Confidence: 0.99594367  
00:42:01.730 --> 00:42:02.230 progress.  
NOTE Confidence: 0.97450423  
00:42:06.505 --> 00:42:07.805 I just wanted to look  
NOTE Confidence: 0.97450423  
00:42:07.864 --> 00:42:09.864 briefly at our major chip  
NOTE Confidence: 0.97450423  
00:42:09.864 --> 00:42:11.225 data sources. You know, the  
NOTE Confidence: 0.97450423  
00:42:11.225 --> 00:42:12.265 the first thing they tell  
NOTE Confidence: 0.97450423  
00:42:12.265 --> 00:42:13.545 you when you go to  
NOTE Confidence: 0.97450423

00:42:13.545 --> 00:42:15.145 make a PowerPoint presentation is

NOTE Confidence: 0.97450423

00:42:15.145 --> 00:42:16.025 don't stand in front of

NOTE Confidence: 0.97450423

00:42:16.025 --> 00:42:16.985 a room and read your

NOTE Confidence: 0.97450423

00:42:16.985 --> 00:42:17.485 slide.

NOTE Confidence: 0.9916119

00:42:18.150 --> 00:42:19.349 But now I'm gonna stand

NOTE Confidence: 0.9916119

00:42:19.349 --> 00:42:20.069 in front of the room

NOTE Confidence: 0.9916119

00:42:20.069 --> 00:42:21.049 and read my slide.

NOTE Confidence: 0.9836464

00:42:22.710 --> 00:42:23.910 We've already mentioned,

NOTE Confidence: 0.9753199

00:42:24.309 --> 00:42:25.510 EHR data is in the

NOTE Confidence: 0.9753199

00:42:25.510 --> 00:42:27.190 OMOP common data model. We'll

NOTE Confidence: 0.9753199

00:42:27.190 --> 00:42:27.910 get into that in a

NOTE Confidence: 0.9753199

00:42:27.910 --> 00:42:28.890 little bit of detail.

NOTE Confidence: 0.9410374

00:42:29.750 --> 00:42:31.690 Real time HL seven data

NOTE Confidence: 0.9410374

00:42:31.935 --> 00:42:33.614 includes things like ADT, lab

NOTE Confidence: 0.9410374

00:42:33.614 --> 00:42:34.915 results, flow sheets,

NOTE Confidence: 0.9922012

00:42:35.935 --> 00:42:36.755 data innovations,

NOTE Confidence: 0.96039385

00:42:37.055 --> 00:42:38.575 orders, and results, which actually

NOTE Confidence: 0.96039385

00:42:38.575 --> 00:42:39.075 contain

NOTE Confidence: 0.9510174

00:42:39.614 --> 00:42:41.235 if you're interested in,

NOTE Confidence: 0.99158555

00:42:42.335 --> 00:42:44.515 laboratory data and instrument data,

NOTE Confidence: 0.9640358

00:42:45.330 --> 00:42:46.770 some of the results and

NOTE Confidence: 0.9640358

00:42:46.770 --> 00:42:48.370 orders going to and from

NOTE Confidence: 0.9640358

00:42:48.370 --> 00:42:50.130 data innovations contain things that

NOTE Confidence: 0.9640358

00:42:50.130 --> 00:42:50.790 are not,

NOTE Confidence: 0.85365975

00:42:51.730 --> 00:42:53.570 in the Beaker Lab system

NOTE Confidence: 0.85365975

00:42:53.570 --> 00:42:54.690 or in or even in

NOTE Confidence: 0.85365975

00:42:54.690 --> 00:42:55.670 the EPIC EHR.

NOTE Confidence: 0.9989113

00:42:56.450 --> 00:42:57.190 We have

NOTE Confidence: 0.9995733

00:42:57.505 --> 00:42:58.325 clinical images

NOTE Confidence: 0.9099743

00:42:58.625 --> 00:43:00.465 that are not generally they're

NOTE Confidence: 0.9099743

00:43:00.465 --> 00:43:00.965 not

NOTE Confidence: 0.820639

00:43:02.145 --> 00:43:03.445 all stored in SHIP,  
NOTE Confidence: 0.9803921

00:43:03.825 --> 00:43:04.325 but,  
NOTE Confidence: 0.9928739

00:43:04.705 --> 00:43:06.065 they can be pulled on  
NOTE Confidence: 0.9928739

00:43:06.065 --> 00:43:07.665 demand using our,  
NOTE Confidence: 0.96847516

00:43:08.065 --> 00:43:09.285 Camino data request  
NOTE Confidence: 0.9823657

00:43:09.760 --> 00:43:11.140 process. So we have access  
NOTE Confidence: 0.9823657

00:43:11.200 --> 00:43:12.480 to all of the clinical  
NOTE Confidence: 0.9823657

00:43:12.480 --> 00:43:13.280 images that are in the  
NOTE Confidence: 0.9823657

00:43:13.280 --> 00:43:14.420 vendor neutral archive.  
NOTE Confidence: 0.94901794

00:43:15.680 --> 00:43:17.920 CT scans, ultrasounds, X rays,  
NOTE Confidence: 0.94901794

00:43:17.920 --> 00:43:19.540 ophthalmological data, ECGs,  
NOTE Confidence: 0.9608985

00:43:19.920 --> 00:43:20.500 you know,  
NOTE Confidence: 0.99447745

00:43:20.800 --> 00:43:22.580 anything that's a clinical image  
NOTE Confidence: 0.99447745

00:43:22.765 --> 00:43:24.045 that was done in the  
NOTE Confidence: 0.99447745

00:43:24.045 --> 00:43:25.244 health system is in the  
NOTE Confidence: 0.99447745

00:43:25.244 --> 00:43:26.305 v in the VNA

NOTE Confidence: 0.96005327  
00:43:26.685 --> 00:43:28.385 and can be pulled,  
NOTE Confidence: 0.9991351  
00:43:29.484 --> 00:43:29.984 via  
NOTE Confidence: 0.98333246  
00:43:30.285 --> 00:43:32.065 the our our extraction process.  
NOTE Confidence: 0.99088323  
00:43:32.525 --> 00:43:33.725 And as I mentioned before,  
NOTE Confidence: 0.99088323  
00:43:33.725 --> 00:43:35.165 we do have genomic data.  
NOTE Confidence: 0.99088323  
00:43:35.165 --> 00:43:35.965 We have a lot of,  
NOTE Confidence: 0.99088323  
00:43:36.125 --> 00:43:37.905 thousands of clinical and research,  
NOTE Confidence: 0.9581456  
00:43:38.810 --> 00:43:39.310 VCF  
NOTE Confidence: 0.9909905  
00:43:39.770 --> 00:43:40.670 files from,  
NOTE Confidence: 0.9147504  
00:43:41.450 --> 00:43:42.969 patients who have, have gone  
NOTE Confidence: 0.9147504  
00:43:43.050 --> 00:43:44.190 undergone ACTX  
NOTE Confidence: 0.9684348  
00:43:44.650 --> 00:43:45.150 testing,  
NOTE Confidence: 0.9925112  
00:43:45.530 --> 00:43:47.450 and generations patients. And we  
NOTE Confidence: 0.9925112  
00:43:47.450 --> 00:43:48.969 have for generations patients, we  
NOTE Confidence: 0.9925112  
00:43:48.969 --> 00:43:50.330 have full exome data as  
NOTE Confidence: 0.9925112

00:43:50.330 --> 00:43:51.610 well. So that's that's another  
NOTE Confidence: 0.9925112

00:43:51.610 --> 00:43:53.150 thing that's available to researchers.  
NOTE Confidence: 0.93203133

00:43:58.355 --> 00:43:59.155 Right. So here we are  
NOTE Confidence: 0.93203133

00:43:59.155 --> 00:44:00.355 at the OMOP common data  
NOTE Confidence: 0.93203133

00:44:00.355 --> 00:44:01.175 model again.  
NOTE Confidence: 0.970598

00:44:02.035 --> 00:44:03.075 Don't wanna dwell on this  
NOTE Confidence: 0.970598

00:44:03.075 --> 00:44:04.035 too much because Rich did  
NOTE Confidence: 0.970598

00:44:04.035 --> 00:44:04.915 a really good job of  
NOTE Confidence: 0.970598

00:44:04.915 --> 00:44:06.455 describing it. But,  
NOTE Confidence: 0.98238593

00:44:07.950 --> 00:44:09.790 I just wanna, emphasize that  
NOTE Confidence: 0.98238593

00:44:09.790 --> 00:44:11.390 common data models are really  
NOTE Confidence: 0.98238593

00:44:11.390 --> 00:44:13.250 the key to collaborative research.  
NOTE Confidence: 0.9983105

00:44:13.869 --> 00:44:15.230 Two different health systems may  
NOTE Confidence: 0.9983105

00:44:15.230 --> 00:44:16.989 have very different and largely  
NOTE Confidence: 0.9983105

00:44:16.989 --> 00:44:17.489 incompatible  
NOTE Confidence: 0.9864435

00:44:17.790 --> 00:44:19.550 EHRs, but the data in

NOTE Confidence: 0.9864435  
00:44:19.550 --> 00:44:20.930 their common data models,  
NOTE Confidence: 0.98117054  
00:44:21.755 --> 00:44:23.355 should be at least mostly  
NOTE Confidence: 0.98117054  
00:44:23.355 --> 00:44:24.815 compatible with each other.  
NOTE Confidence: 0.9030297  
00:44:25.195 --> 00:44:26.015 And OMOP,  
NOTE Confidence: 0.9550387  
00:44:27.114 --> 00:44:28.875 maintained by Odysee, the,  
NOTE Confidence: 0.9855216  
00:44:30.075 --> 00:44:31.195 I forget what the I  
NOTE Confidence: 0.9855216  
00:44:31.195 --> 00:44:33.035 forget what the acronym expands  
NOTE Confidence: 0.9855216  
00:44:33.035 --> 00:44:34.555 to, but there's the, there's  
NOTE Confidence: 0.9855216  
00:44:34.555 --> 00:44:35.695 the URL for it.  
NOTE Confidence: 0.93616724  
00:44:36.510 --> 00:44:37.790 That's the pre preeminent,  
NOTE Confidence: 0.9007659  
00:44:38.750 --> 00:44:40.110 common data model these days.  
NOTE Confidence: 0.9007659  
00:44:40.110 --> 00:44:40.750 And we've,  
NOTE Confidence: 0.9460888  
00:44:41.230 --> 00:44:42.430 many of our research have  
NOTE Confidence: 0.9460888  
00:44:42.430 --> 00:44:44.290 all researchers have already used  
NOTE Confidence: 0.9460888  
00:44:44.430 --> 00:44:46.190 OMOP data extracts to to  
NOTE Confidence: 0.9460888

00:44:46.190 --> 00:44:48.030 do collaborative research with other  
NOTE Confidence: 0.9460888

00:44:48.030 --> 00:44:48.530 institutions.  
NOTE Confidence: 0.9822179

00:44:52.234 --> 00:44:53.755 OMOP does not contain everything  
NOTE Confidence: 0.9822179

00:44:53.755 --> 00:44:54.734 that's in the EHR,  
NOTE Confidence: 0.9542225

00:44:55.434 --> 00:44:56.795 but its fairly simple data  
NOTE Confidence: 0.9542225

00:44:56.795 --> 00:44:58.714 model covers eighty to ninety  
NOTE Confidence: 0.9542225

00:44:58.714 --> 00:45:00.015 percent of what's in EPIC.  
NOTE Confidence: 0.9522647

00:45:01.114 --> 00:45:03.000 And as Rich already mentioned  
NOTE Confidence: 0.9522647

00:45:03.000 --> 00:45:04.360 that there's a a gradual  
NOTE Confidence: 0.9522647

00:45:04.360 --> 00:45:06.040 reduction in complexity as you  
NOTE Confidence: 0.9522647

00:45:06.040 --> 00:45:07.480 get further away from the  
NOTE Confidence: 0.9522647

00:45:07.480 --> 00:45:09.420 Epic Chronicles database. Epic,  
NOTE Confidence: 0.98072624

00:45:10.440 --> 00:45:12.200 has an, an ETL to  
NOTE Confidence: 0.98072624

00:45:12.200 --> 00:45:13.560 Clarity, which has more than  
NOTE Confidence: 0.98072624

00:45:13.560 --> 00:45:15.000 eighteen thousand tables, I guess,  
NOTE Confidence: 0.98072624

00:45:15.000 --> 00:45:16.300 close to twenty thousand.



NOTE Confidence: 0.91148823  
00:45:17.934 --> 00:45:19.934 That in turn is, extracted  
NOTE Confidence: 0.91148823  
00:45:19.934 --> 00:45:21.855 to Caboodle, which has some  
NOTE Confidence: 0.91148823  
00:45:21.855 --> 00:45:23.555 more like five hundred tables.  
NOTE Confidence: 0.96349716  
00:45:24.094 --> 00:45:25.055 And when you get to  
NOTE Confidence: 0.96349716  
00:45:25.055 --> 00:45:26.734 OMOP, it actually has a  
NOTE Confidence: 0.96349716  
00:45:26.734 --> 00:45:28.174 relatively small number, like a  
NOTE Confidence: 0.96349716  
00:45:28.174 --> 00:45:28.914 few dozen  
NOTE Confidence: 0.9381431  
00:45:29.775 --> 00:45:31.454 without it it cuts down  
NOTE Confidence: 0.9381431  
00:45:31.454 --> 00:45:33.234 on data complexity without  
NOTE Confidence: 0.9818123  
00:45:33.540 --> 00:45:35.620 leaving out significant amounts of  
NOTE Confidence: 0.9818123  
00:45:35.620 --> 00:45:36.520 the data itself.  
NOTE Confidence: 0.9837544  
00:45:37.540 --> 00:45:38.580 Means that queries are a  
NOTE Confidence: 0.9837544  
00:45:38.580 --> 00:45:40.420 lot easier to construct compared  
NOTE Confidence: 0.9837544  
00:45:40.420 --> 00:45:42.420 to Clarity, and it's eighteen  
NOTE Confidence: 0.9837544  
00:45:42.420 --> 00:45:43.700 thousand tables. You you still  
NOTE Confidence: 0.9837544

00:45:43.700 --> 00:45:45.160 have to understand your data,  
NOTE Confidence: 0.9996997

00:45:45.620 --> 00:45:46.900 but the process is a  
NOTE Confidence: 0.9996997

00:45:46.900 --> 00:45:47.640 lot simpler.  
NOTE Confidence: 0.94700116

00:45:49.165 --> 00:45:51.005 Our OMOP database is pseudo  
NOTE Confidence: 0.94700116

00:45:51.005 --> 00:45:52.224 relational, meaning  
NOTE Confidence: 0.9768689

00:45:52.844 --> 00:45:54.125 it can behave like a  
NOTE Confidence: 0.9768689

00:45:54.125 --> 00:45:55.885 SQL database, and you can  
NOTE Confidence: 0.9768689

00:45:55.885 --> 00:45:57.424 actually construct queries  
NOTE Confidence: 0.9989581

00:45:58.045 --> 00:45:58.545 in  
NOTE Confidence: 0.97966504

00:45:58.844 --> 00:45:59.744 pure SQL,  
NOTE Confidence: 0.92771095

00:46:00.940 --> 00:46:02.860 including joins, windows, and things  
NOTE Confidence: 0.92771095

00:46:02.860 --> 00:46:04.060 like that, or you can  
NOTE Confidence: 0.92771095

00:46:04.060 --> 00:46:05.600 use pure spark syntax.  
NOTE Confidence: 0.9702702

00:46:06.219 --> 00:46:08.060 Our computing environment can let  
NOTE Confidence: 0.9702702

00:46:08.060 --> 00:46:09.420 you do that either way  
NOTE Confidence: 0.9702702

00:46:09.420 --> 00:46:10.719 depending on what you prefer.

NOTE Confidence: 0.97026116  
00:46:12.140 --> 00:46:13.660 Either way, you can run  
NOTE Confidence: 0.97026116  
00:46:13.660 --> 00:46:15.580 queries on OMOP data many,  
NOTE Confidence: 0.97026116  
00:46:15.580 --> 00:46:16.974 many times faster than you  
NOTE Confidence: 0.97026116  
00:46:16.974 --> 00:46:18.415 could run data on on,  
NOTE Confidence: 0.97026116  
00:46:18.734 --> 00:46:19.935 run queries on the equivalent  
NOTE Confidence: 0.97026116  
00:46:19.935 --> 00:46:21.234 data in a SQL Server.  
NOTE Confidence: 0.97460985  
00:46:23.775 --> 00:46:24.575 One of the things I  
NOTE Confidence: 0.97460985  
00:46:24.575 --> 00:46:26.415 didn't, get into that that  
NOTE Confidence: 0.97460985  
00:46:26.415 --> 00:46:27.695 I didn't even touch on  
NOTE Confidence: 0.97460985  
00:46:27.695 --> 00:46:29.295 in our big system diagram  
NOTE Confidence: 0.97460985  
00:46:29.295 --> 00:46:30.355 was data robot.  
NOTE Confidence: 0.9423555  
00:46:31.850 --> 00:46:33.230 We have a fully functioning  
NOTE Confidence: 0.9423555  
00:46:33.290 --> 00:46:35.310 data robot installation and ship.  
NOTE Confidence: 0.93536323  
00:46:36.489 --> 00:46:37.610 I've laid out kind of  
NOTE Confidence: 0.93536323  
00:46:37.610 --> 00:46:38.670 the basic features,  
NOTE Confidence: 0.9832342

00:46:39.770 --> 00:46:41.210 on my slide, but in  
NOTE Confidence: 0.9832342

00:46:41.210 --> 00:46:43.230 my sort of limited experience  
NOTE Confidence: 0.9832342

00:46:43.290 --> 00:46:44.650 with data robot, it's a  
NOTE Confidence: 0.9832342

00:46:44.650 --> 00:46:46.190 really good tool for understanding  
NOTE Confidence: 0.9458773

00:46:46.755 --> 00:46:48.114 a dataset even if you're  
NOTE Confidence: 0.9458773

00:46:48.114 --> 00:46:49.234 not trying to develop predict  
NOTE Confidence: 0.9458773

00:46:49.394 --> 00:46:50.454 a predictive model.  
NOTE Confidence: 0.9900241

00:46:50.835 --> 00:46:51.815 But if you are,  
NOTE Confidence: 0.99031395

00:46:52.594 --> 00:46:54.694 it's relatively painless way to  
NOTE Confidence: 0.99031395

00:46:54.755 --> 00:46:56.295 pull a dataset in,  
NOTE Confidence: 0.98899525

00:46:57.714 --> 00:46:59.875 have the, have DataRobot kind  
NOTE Confidence: 0.98899525

00:46:59.875 --> 00:47:01.335 of analyze it. It will  
NOTE Confidence: 0.98899525

00:47:01.599 --> 00:47:04.099 tell you stuff. It'll basically  
NOTE Confidence: 0.98899525

00:47:04.319 --> 00:47:05.359 take care of a lot  
NOTE Confidence: 0.98899525

00:47:05.359 --> 00:47:06.800 of your data cleaning and  
NOTE Confidence: 0.98899525

00:47:06.800 --> 00:47:08.339 data engineering for you.

NOTE Confidence: 0.984271

00:47:09.359 --> 00:47:10.239 If you wanna make a

NOTE Confidence: 0.984271

00:47:10.239 --> 00:47:11.940 predictive model, it will run

NOTE Confidence: 0.984271

00:47:12.160 --> 00:47:13.920 many, many competing models against

NOTE Confidence: 0.984271

00:47:13.920 --> 00:47:14.960 each other and will tell

NOTE Confidence: 0.984271

00:47:14.960 --> 00:47:16.505 you what what the best

NOTE Confidence: 0.984271

00:47:16.505 --> 00:47:17.725 one seems to be.

NOTE Confidence: 0.9737927

00:47:18.585 --> 00:47:20.205 You can easily tune hyperparameters.

NOTE Confidence: 0.99230087

00:47:21.385 --> 00:47:22.585 It's not a black box

NOTE Confidence: 0.99230087

00:47:22.585 --> 00:47:23.705 because it's very good at

NOTE Confidence: 0.99230087

00:47:23.705 --> 00:47:24.844 actually showing you

NOTE Confidence: 0.9791739

00:47:25.145 --> 00:47:25.965 which parameters,

NOTE Confidence: 0.9914736

00:47:26.745 --> 00:47:28.344 and and which data elements

NOTE Confidence: 0.9914736

00:47:28.344 --> 00:47:28.844 matter.

NOTE Confidence: 0.9276414

00:47:30.520 --> 00:47:32.120 It has some, what is

NOTE Confidence: 0.9276414

00:47:32.120 --> 00:47:33.720 called, MLOps built into it,

NOTE Confidence: 0.9276414

00:47:33.720 --> 00:47:36.200 machine language ops, meaning that

NOTE Confidence: 0.9276414

00:47:36.200 --> 00:47:38.120 if you develop a, predictive

NOTE Confidence: 0.9276414

00:47:38.120 --> 00:47:38.620 model,

NOTE Confidence: 0.9626158

00:47:38.920 --> 00:47:40.040 you can set up an,

NOTE Confidence: 0.9626158

00:47:40.520 --> 00:47:42.040 a method for sort of

NOTE Confidence: 0.9626158

00:47:42.040 --> 00:47:43.960 continuous monitoring of the quality

NOTE Confidence: 0.9626158

00:47:43.960 --> 00:47:45.594 of your prediction and sort

NOTE Confidence: 0.9626158

00:47:45.594 --> 00:47:46.815 of evaluating tuning.

NOTE Confidence: 0.9672641

00:47:47.275 --> 00:47:47.594 And,

NOTE Confidence: 0.99863875

00:47:48.315 --> 00:47:49.275 they've also put a lot

NOTE Confidence: 0.99863875

00:47:49.275 --> 00:47:51.275 of effort into generative AI

NOTE Confidence: 0.99863875

00:47:51.275 --> 00:47:51.775 integration,

NOTE Confidence: 0.9490759

00:47:52.155 --> 00:47:52.955 which I have to say,

NOTE Confidence: 0.9490759

00:47:52.955 --> 00:47:53.455 I

NOTE Confidence: 0.9632116

00:47:53.835 --> 00:47:55.195 don't know exactly how that

NOTE Confidence: 0.9632116

00:47:55.195 --> 00:47:56.795 works, but suffice it to

NOTE Confidence: 0.9632116  
00:47:56.795 --> 00:47:58.235 say that DataRobot is highly  
NOTE Confidence: 0.9632116  
00:47:58.235 --> 00:47:59.755 committed to gen GenAI as  
NOTE Confidence: 0.9632116  
00:47:59.755 --> 00:48:00.255 well.  
NOTE Confidence: 0.98166376  
00:48:01.160 --> 00:48:02.440 So I I recommend, you  
NOTE Confidence: 0.98166376  
00:48:02.440 --> 00:48:03.560 know, data robot if you  
NOTE Confidence: 0.98166376  
00:48:03.560 --> 00:48:04.380 wanna try  
NOTE Confidence: 0.94819456  
00:48:04.760 --> 00:48:05.720 to even just play around  
NOTE Confidence: 0.94819456  
00:48:05.720 --> 00:48:07.400 with, developing a a predictive  
NOTE Confidence: 0.94819456  
00:48:07.400 --> 00:48:07.900 model.  
NOTE Confidence: 0.9899189  
00:48:09.800 --> 00:48:11.340 Now we're into Camino,  
NOTE Confidence: 0.9771745  
00:48:12.840 --> 00:48:13.800 which is kind of the  
NOTE Confidence: 0.9771745  
00:48:13.800 --> 00:48:14.780 core of Chip.  
NOTE Confidence: 0.9990883  
00:48:15.555 --> 00:48:16.515 It's the way that most  
NOTE Confidence: 0.9990883  
00:48:16.515 --> 00:48:17.714 of us will interact with  
NOTE Confidence: 0.9990883  
00:48:17.714 --> 00:48:19.335 the computational health platform.  
NOTE Confidence: 0.93063176

00:48:20.114 --> 00:48:21.075 Here, I'm showing you an  
NOTE Confidence: 0.93063176

00:48:21.075 --> 00:48:21.954 art a link to a  
NOTE Confidence: 0.93063176

00:48:21.954 --> 00:48:23.155 nice article that Fang Chi  
NOTE Confidence: 0.93063176

00:48:23.155 --> 00:48:24.435 Lin and others published last  
NOTE Confidence: 0.93063176

00:48:24.435 --> 00:48:24.935 summer.  
NOTE Confidence: 0.96506405

00:48:25.395 --> 00:48:27.155 I recommend reading it. It  
NOTE Confidence: 0.96506405

00:48:27.155 --> 00:48:29.040 has a slightly different take,  
NOTE Confidence: 0.9812784

00:48:29.520 --> 00:48:31.120 on Camino than what I'm  
NOTE Confidence: 0.9812784

00:48:31.120 --> 00:48:32.719 presenting here, although I think  
NOTE Confidence: 0.9812784

00:48:32.719 --> 00:48:34.180 the information concepts  
NOTE Confidence: 0.99605936

00:48:34.800 --> 00:48:35.300 overlap.  
NOTE Confidence: 0.95717055

00:48:35.840 --> 00:48:36.160 And,  
NOTE Confidence: 0.904423

00:48:37.040 --> 00:48:38.800 my colleague, Alpa Paselli, will  
NOTE Confidence: 0.904423

00:48:38.800 --> 00:48:40.400 be giving, giving a a  
NOTE Confidence: 0.904423

00:48:40.400 --> 00:48:41.840 proper demo of Camino in  
NOTE Confidence: 0.904423

00:48:41.840 --> 00:48:42.960 a bit, so stay tuned



NOTE Confidence: 0.904423  
00:48:42.960 --> 00:48:43.620 for that.  
NOTE Confidence: 0.9987928  
00:48:47.285 --> 00:48:49.145 Here is the team architecture.  
NOTE Confidence: 0.97650135  
00:48:51.685 --> 00:48:53.705 It's you, for for,  
NOTE Confidence: 0.97849274  
00:48:54.484 --> 00:48:55.465 I think Rich,  
NOTE Confidence: 0.9700503  
00:48:56.244 --> 00:48:58.165 touched on prep to research  
NOTE Confidence: 0.9700503  
00:48:58.165 --> 00:49:00.030 teams, which is a, another  
NOTE Confidence: 0.9700503  
00:49:00.030 --> 00:49:01.630 kind of Camino team. But  
NOTE Confidence: 0.9700503  
00:49:01.630 --> 00:49:03.550 for most research purposes, if  
NOTE Confidence: 0.9700503  
00:49:03.550 --> 00:49:05.170 you start with an IRB,  
NOTE Confidence: 0.93205863  
00:49:06.110 --> 00:49:07.730 and a Helix data request  
NOTE Confidence: 0.93205863  
00:49:07.790 --> 00:49:08.690 and a PI,  
NOTE Confidence: 0.952128  
00:49:09.710 --> 00:49:11.150 if you've got those things  
NOTE Confidence: 0.952128  
00:49:11.150 --> 00:49:12.290 established, then,  
NOTE Confidence: 0.93552566  
00:49:13.230 --> 00:49:14.930 and your request is,  
NOTE Confidence: 0.98046666  
00:49:15.385 --> 00:49:16.585 submitted and granted, you get  
NOTE Confidence: 0.98046666

00:49:16.585 --> 00:49:17.645 a Camino team,  
NOTE Confidence: 0.96060693  
00:49:18.425 --> 00:49:20.525 whose name is built from  
NOTE Confidence: 0.96060693  
00:49:20.585 --> 00:49:22.265 the IRB, the Helix data  
NOTE Confidence: 0.96060693  
00:49:22.265 --> 00:49:23.485 request, and your PI.  
NOTE Confidence: 0.96550095  
00:49:24.345 --> 00:49:26.525 Every team gets a quota,  
NOTE Confidence: 0.853902  
00:49:27.065 --> 00:49:27.565 which,  
NOTE Confidence: 0.974515  
00:49:28.130 --> 00:49:29.489 allows you a total number  
NOTE Confidence: 0.974515  
00:49:29.489 --> 00:49:31.489 of g, CPUs, GPUs, and  
NOTE Confidence: 0.974515  
00:49:31.489 --> 00:49:31.989 memory.  
NOTE Confidence: 0.98569584  
00:49:32.610 --> 00:49:34.050 Those quotas are flexible. It's  
NOTE Confidence: 0.98569584  
00:49:34.050 --> 00:49:35.489 not it it's it the  
NOTE Confidence: 0.98569584  
00:49:35.489 --> 00:49:37.730 quota is assigned depending on  
NOTE Confidence: 0.98569584  
00:49:37.730 --> 00:49:38.690 the size of the team,  
NOTE Confidence: 0.98569584  
00:49:38.690 --> 00:49:39.570 the size of the data  
NOTE Confidence: 0.98569584  
00:49:39.570 --> 00:49:40.850 request, and your and your  
NOTE Confidence: 0.98569584  
00:49:40.850 --> 00:49:42.684 expected needs. Quotas can also

NOTE Confidence: 0.98569584  
00:49:42.684 --> 00:49:44.065 be changed as necessary.  
NOTE Confidence: 0.933592  
00:49:47.325 --> 00:49:47.825 So  
NOTE Confidence: 0.7810507  
00:49:48.204 --> 00:49:48.704 teams,  
NOTE Confidence: 0.9978168  
00:49:50.045 --> 00:49:50.545 contain  
NOTE Confidence: 0.96439  
00:49:50.844 --> 00:49:53.184 users, and users have environments.  
NOTE Confidence: 0.95423794  
00:49:56.219 --> 00:49:57.420 So a compute  
NOTE Confidence: 0.95108515  
00:49:57.980 --> 00:49:58.719 every user  
NOTE Confidence: 0.99261117  
00:49:59.100 --> 00:50:00.239 can spin up  
NOTE Confidence: 0.993139  
00:50:00.540 --> 00:50:01.440 one or more,  
NOTE Confidence: 0.98511183  
00:50:02.060 --> 00:50:03.420 what we call environments, which  
NOTE Confidence: 0.98511183  
00:50:03.420 --> 00:50:04.160 are essentially  
NOTE Confidence: 0.8465718  
00:50:04.540 --> 00:50:05.040 fully,  
NOTE Confidence: 0.93380874  
00:50:06.140 --> 00:50:06.960 fully provisioned,  
NOTE Confidence: 0.99573404  
00:50:07.580 --> 00:50:08.880 Linux virtual machines.  
NOTE Confidence: 0.9515055  
00:50:10.395 --> 00:50:11.535 User environments  
NOTE Confidence: 0.9394683

00:50:11.995 --> 00:50:13.355 are private. So if you  
NOTE Confidence: 0.9394683

00:50:13.355 --> 00:50:14.335 create an environment,  
NOTE Confidence: 0.99841785

00:50:15.195 --> 00:50:16.235 you are the only one  
NOTE Confidence: 0.99841785

00:50:16.235 --> 00:50:18.155 that accesses the compute power  
NOTE Confidence: 0.99841785

00:50:18.155 --> 00:50:19.135 in that environment.  
NOTE Confidence: 0.9903953

00:50:19.594 --> 00:50:21.195 So your colleague next to  
NOTE Confidence: 0.9903953

00:50:21.195 --> 00:50:22.235 you will have their own  
NOTE Confidence: 0.9903953

00:50:22.235 --> 00:50:22.735 environment,  
NOTE Confidence: 0.98437905

00:50:23.130 --> 00:50:24.170 and they may have a  
NOTE Confidence: 0.98437905

00:50:24.170 --> 00:50:26.109 slightly different they may,  
NOTE Confidence: 0.9909412

00:50:27.609 --> 00:50:29.289 define a slightly different environment  
NOTE Confidence: 0.9909412

00:50:29.289 --> 00:50:30.730 than you. More or less  
NOTE Confidence: 0.9909412

00:50:30.730 --> 00:50:32.589 memory, more or less CPUs,  
NOTE Confidence: 0.9909412

00:50:32.809 --> 00:50:34.589 maybe with GPUs, maybe without.  
NOTE Confidence: 0.9980601

00:50:35.769 --> 00:50:36.670 Data requests  
NOTE Confidence: 0.9972764

00:50:37.944 --> 00:50:39.964 can be added to environments

NOTE Confidence: 0.90896565  
00:50:40.744 --> 00:50:41.944 depending on how many you  
NOTE Confidence: 0.90896565  
00:50:41.944 --> 00:50:43.145 know, the nature of your  
NOTE Confidence: 0.90896565  
00:50:43.145 --> 00:50:44.444 research and your IRB.  
NOTE Confidence: 0.98106796  
00:50:46.744 --> 00:50:48.505 Data is shared within the  
NOTE Confidence: 0.98106796  
00:50:48.505 --> 00:50:49.484 team. So  
NOTE Confidence: 0.9843006  
00:50:49.944 --> 00:50:51.464 this user I've got you  
NOTE Confidence: 0.9843006  
00:50:51.464 --> 00:50:52.265 know, I have  
NOTE Confidence: 0.91724044  
00:50:53.410 --> 00:50:55.250 I'm showing as mounting three  
NOTE Confidence: 0.91724044  
00:50:55.250 --> 00:50:57.190 separate directories of data requests.  
NOTE Confidence: 0.9278981  
00:50:57.969 --> 00:50:58.850 They can add that to  
NOTE Confidence: 0.9278981  
00:50:58.850 --> 00:51:00.450 their environment. But there,  
NOTE Confidence: 0.99750704  
00:51:01.010 --> 00:51:02.290 another user in that team  
NOTE Confidence: 0.99750704  
00:51:02.290 --> 00:51:04.050 can also access those data  
NOTE Confidence: 0.99750704  
00:51:04.050 --> 00:51:04.550 requests.  
NOTE Confidence: 0.9973215  
00:51:05.650 --> 00:51:07.670 So data requests are shared  
NOTE Confidence: 0.9934924

00:51:08.325 --> 00:51:09.765 within a team, and then  
NOTE Confidence: 0.9934924

00:51:09.765 --> 00:51:11.364 every team has a shared  
NOTE Confidence: 0.9934924

00:51:11.364 --> 00:51:13.065 data folder that is automatically  
NOTE Confidence: 0.999276

00:51:13.364 --> 00:51:14.265 part of everyone's  
NOTE Confidence: 0.99913526

00:51:14.805 --> 00:51:15.305 environment.  
NOTE Confidence: 0.8601886

00:51:20.244 --> 00:51:21.065 Let's see.  
NOTE Confidence: 0.9951544

00:51:23.930 --> 00:51:24.810 Oh, yeah. So a little  
NOTE Confidence: 0.9951544

00:51:24.810 --> 00:51:26.030 bit more on environments.  
NOTE Confidence: 0.9939872

00:51:27.050 --> 00:51:28.730 Environment is a complete Linux  
NOTE Confidence: 0.9939872

00:51:28.730 --> 00:51:29.630 virtual machine.  
NOTE Confidence: 0.9737868

00:51:31.130 --> 00:51:32.730 The what you get in  
NOTE Confidence: 0.9737868

00:51:32.730 --> 00:51:34.109 your, you can  
NOTE Confidence: 0.99841404

00:51:35.385 --> 00:51:37.245 request certain configurations  
NOTE Confidence: 0.96979314

00:51:37.545 --> 00:51:39.805 of CPU, GPU, and memory.  
NOTE Confidence: 0.9518601

00:51:40.344 --> 00:51:41.625 It is subject to your,  
NOTE Confidence: 0.9518601

00:51:41.945 --> 00:51:43.645 availability and your team quotas.

NOTE Confidence: 0.9914603  
00:51:45.145 --> 00:51:46.685 When you've defined an environment,  
NOTE Confidence: 0.9914603  
00:51:46.825 --> 00:51:47.864 what we're looking at here  
NOTE Confidence: 0.9914603  
00:51:47.864 --> 00:51:48.985 on on the left is  
NOTE Confidence: 0.9914603  
00:51:48.985 --> 00:51:50.819 what an environment actually looks  
NOTE Confidence: 0.9914603  
00:51:50.819 --> 00:51:51.799 like in Camino.  
NOTE Confidence: 0.95551574  
00:51:52.900 --> 00:51:53.960 And there are two,  
NOTE Confidence: 0.9954906  
00:51:56.099 --> 00:51:57.539 there are two, items here  
NOTE Confidence: 0.9954906  
00:51:57.539 --> 00:51:59.460 under the active sessions in  
NOTE Confidence: 0.9954906  
00:51:59.460 --> 00:52:00.739 the active sessions box. One  
NOTE Confidence: 0.9954906  
00:52:00.739 --> 00:52:01.619 is a is a is  
NOTE Confidence: 0.9954906  
00:52:01.619 --> 00:52:02.359 a hyperlink.  
NOTE Confidence: 0.97602254  
00:52:02.875 --> 00:52:03.675 That's the,  
NOTE Confidence: 0.99438524  
00:52:04.235 --> 00:52:05.455 link to the JupyterLab,  
NOTE Confidence: 0.9131892  
00:52:06.555 --> 00:52:07.055 GUI,  
NOTE Confidence: 0.9990574  
00:52:07.755 --> 00:52:09.375 which allows you access to  
NOTE Confidence: 0.9066323

00:52:10.235 --> 00:52:10.735 Jupyter,  
NOTE Confidence: 0.8557307  
00:52:11.114 --> 00:52:12.015 Jupyter notebook,  
NOTE Confidence: 0.87615436  
00:52:12.795 --> 00:52:13.935 things like our,  
NOTE Confidence: 0.995265  
00:52:14.555 --> 00:52:15.055 and  
NOTE Confidence: 0.9973697  
00:52:17.719 --> 00:52:18.599 the, those of you who  
NOTE Confidence: 0.9973697  
00:52:18.599 --> 00:52:19.099 are  
NOTE Confidence: 0.9876644  
00:52:19.480 --> 00:52:21.339 command line fans can also,  
NOTE Confidence: 0.9752162  
00:52:22.680 --> 00:52:25.400 do SSH directly from your,  
NOTE Confidence: 0.9752162  
00:52:25.400 --> 00:52:26.859 say, your VDI session,  
NOTE Confidence: 0.9939457  
00:52:27.559 --> 00:52:28.599 and you can go straight  
NOTE Confidence: 0.9939457  
00:52:28.599 --> 00:52:30.040 to the command line of  
NOTE Confidence: 0.9939457  
00:52:30.040 --> 00:52:31.719 your environment. It's the same  
NOTE Confidence: 0.9939457  
00:52:31.719 --> 00:52:33.525 thing. If you're running a  
NOTE Confidence: 0.99077135  
00:52:33.825 --> 00:52:34.885 Python or  
NOTE Confidence: 0.97712755  
00:52:35.265 --> 00:52:36.305 or or some or any  
NOTE Confidence: 0.97712755  
00:52:36.305 --> 00:52:37.665 sort of script, from the



NOTE Confidence: 0.97712755

00:52:37.665 --> 00:52:39.665 command line, you're really accessing

NOTE Confidence: 0.97712755

00:52:39.665 --> 00:52:40.625 the same machine, the same

NOTE Confidence: 0.97712755

00:52:40.625 --> 00:52:42.225 data, the same directory structure

NOTE Confidence: 0.97712755

00:52:42.225 --> 00:52:43.765 that JupyterLab does.

NOTE Confidence: 0.7846947

00:52:47.110 --> 00:52:47.610 See.

NOTE Confidence: 0.99142784

00:52:48.150 --> 00:52:49.270 And that's I think that's

NOTE Confidence: 0.99142784

00:52:49.270 --> 00:52:50.310 about all I've got to

NOTE Confidence: 0.99142784

00:52:50.310 --> 00:52:51.690 say for that slide.

NOTE Confidence: 0.9431843

00:52:54.230 --> 00:52:54.730 So

NOTE Confidence: 0.98979604

00:52:55.190 --> 00:52:56.710 I've already said that Camino

NOTE Confidence: 0.98979604

00:52:56.710 --> 00:52:59.050 environments have flexible computing power.

NOTE Confidence: 0.9725884

00:52:59.835 --> 00:53:00.475 They can do a lot

NOTE Confidence: 0.9725884

00:53:00.475 --> 00:53:01.915 of different things depending on

NOTE Confidence: 0.9725884

00:53:01.915 --> 00:53:03.594 circumstances. And I'm I'm gonna

NOTE Confidence: 0.9725884

00:53:03.594 --> 00:53:05.275 apologize in advance to our

NOTE Confidence: 0.9725884

00:53:05.275 --> 00:53:06.555 fans in the audience here,  
NOTE Confidence: 0.9725884

00:53:06.875 --> 00:53:07.755 but I'm gonna leave it  
NOTE Confidence: 0.9725884

00:53:07.755 --> 00:53:09.195 out in my in this  
NOTE Confidence: 0.9725884

00:53:09.195 --> 00:53:11.114 slide and focus on Python  
NOTE Confidence: 0.9725884

00:53:11.114 --> 00:53:11.775 and PySpark.  
NOTE Confidence: 0.97967094

00:53:12.810 --> 00:53:14.270 You could have an environment  
NOTE Confidence: 0.97967094

00:53:14.410 --> 00:53:15.930 with two CPUs and eight  
NOTE Confidence: 0.97967094

00:53:15.930 --> 00:53:18.010 gigabytes of memory or sixty  
NOTE Confidence: 0.97967094

00:53:18.010 --> 00:53:19.610 four CPUs and two hundred  
NOTE Confidence: 0.97967094

00:53:19.610 --> 00:53:20.810 and fifty six gigabytes of  
NOTE Confidence: 0.97967094

00:53:20.810 --> 00:53:22.110 memory and with or without  
NOTE Confidence: 0.9921288

00:53:22.570 --> 00:53:23.070 GPUs.  
NOTE Confidence: 0.96239865

00:53:25.674 --> 00:53:27.535 The key thing about PySpark,  
NOTE Confidence: 0.96239865

00:53:27.755 --> 00:53:29.614 Python with Spark, is that  
NOTE Confidence: 0.96239865

00:53:29.835 --> 00:53:31.775 it is it creates distributed  
NOTE Confidence: 0.96129596

00:53:32.075 --> 00:53:32.575 computing.

NOTE Confidence: 0.99097115  
00:53:33.114 --> 00:53:34.315 So you can with if  
NOTE Confidence: 0.99097115  
00:53:34.315 --> 00:53:35.755 you're running a PySpark script,  
NOTE Confidence: 0.99097115  
00:53:35.755 --> 00:53:36.954 which looks very much like  
NOTE Confidence: 0.99097115  
00:53:36.954 --> 00:53:37.454 Python  
NOTE Confidence: 0.969252  
00:53:37.835 --> 00:53:40.255 with SQL statements thrown in,  
NOTE Confidence: 0.97749066  
00:53:40.680 --> 00:53:41.319 You can,  
NOTE Confidence: 0.99619305  
00:53:41.719 --> 00:53:43.880 distribute very large queries over  
NOTE Confidence: 0.99619305  
00:53:43.880 --> 00:53:45.960 many executors to immensely speed  
NOTE Confidence: 0.99619305  
00:53:45.960 --> 00:53:47.400 up your your processing. You're  
NOTE Confidence: 0.99619305  
00:53:47.400 --> 00:53:48.380 not simply  
NOTE Confidence: 0.9913797  
00:53:48.680 --> 00:53:49.880 even in even with your  
NOTE Confidence: 0.9913797  
00:53:49.880 --> 00:53:51.319 environment, you've got you're running  
NOTE Confidence: 0.9913797  
00:53:51.319 --> 00:53:52.859 in one little,  
NOTE Confidence: 0.9730181  
00:53:53.239 --> 00:53:54.915 virtual machine. But when you're  
NOTE Confidence: 0.9730181  
00:53:54.915 --> 00:53:55.415 running,  
NOTE Confidence: 0.99929756

00:53:56.195 --> 00:53:57.655 queries from JupyterLab,  
NOTE Confidence: 0.9729485

00:53:58.195 --> 00:53:59.315 you can actually be spinning  
NOTE Confidence: 0.9729485

00:53:59.315 --> 00:54:00.915 up many, many executors to  
NOTE Confidence: 0.9729485

00:54:00.915 --> 00:54:02.855 speed up your, compute task.  
NOTE Confidence: 0.9927107

00:54:05.155 --> 00:54:05.895 We have,  
NOTE Confidence: 0.93861854

00:54:06.435 --> 00:54:07.795 flexible means of putting in  
NOTE Confidence: 0.93861854

00:54:07.795 --> 00:54:09.415 data requests. Now everything  
NOTE Confidence: 0.9996549

00:54:09.719 --> 00:54:11.560 that I'm describing here should  
NOTE Confidence: 0.9996549

00:54:11.560 --> 00:54:13.099 be subject to your  
NOTE Confidence: 0.99195725

00:54:13.560 --> 00:54:14.859 IRB and your,  
NOTE Confidence: 0.9473088

00:54:15.480 --> 00:54:16.619 Helix data request.  
NOTE Confidence: 0.94333047

00:54:17.480 --> 00:54:19.160 And Helix data the data  
NOTE Confidence: 0.94333047

00:54:19.160 --> 00:54:20.760 requests made in Camino have  
NOTE Confidence: 0.94333047

00:54:20.760 --> 00:54:21.800 to be approved by an  
NOTE Confidence: 0.94333047

00:54:21.800 --> 00:54:22.300 admin.  
NOTE Confidence: 0.94279176

00:54:22.760 --> 00:54:24.040 But for instance, you can

NOTE Confidence: 0.97208834  
00:54:25.855 --> 00:54:26.655 you have a, you know,  
NOTE Confidence: 0.97208834  
00:54:26.655 --> 00:54:27.614 a few different ways of  
NOTE Confidence: 0.97208834  
00:54:27.614 --> 00:54:28.675 requesting data.  
NOTE Confidence: 0.95471084  
00:54:30.335 --> 00:54:32.515 I mentioned genomics, and genomics  
NOTE Confidence: 0.95471084  
00:54:32.575 --> 00:54:33.855 data is available on Chip,  
NOTE Confidence: 0.95471084  
00:54:33.855 --> 00:54:35.375 but it's not part of  
NOTE Confidence: 0.95471084  
00:54:35.375 --> 00:54:35.875 the,  
NOTE Confidence: 0.95940554  
00:54:36.735 --> 00:54:38.035 sort of GUI based  
NOTE Confidence: 0.9171203  
00:54:39.535 --> 00:54:40.835 data request mechanism.  
NOTE Confidence: 0.9640467  
00:54:42.590 --> 00:54:44.030 But I've I've got I'm  
NOTE Confidence: 0.9640467  
00:54:44.030 --> 00:54:45.730 showing one of the pathways  
NOTE Confidence: 0.9640467  
00:54:45.870 --> 00:54:47.870 for, for instance, selecting image  
NOTE Confidence: 0.9640467  
00:54:47.870 --> 00:54:48.370 data.  
NOTE Confidence: 0.94743115  
00:54:50.830 --> 00:54:52.030 For instance, you can you  
NOTE Confidence: 0.94743115  
00:54:52.030 --> 00:54:54.114 start by picking imaging or  
NOTE Confidence: 0.94743115

00:54:54.114 --> 00:54:55.094 OMOP data,  
NOTE Confidence: 0.9288525

00:54:55.635 --> 00:54:57.635 possibly or genomic data eventually  
NOTE Confidence: 0.9288525

00:54:57.635 --> 00:54:58.515 once we have that in  
NOTE Confidence: 0.9288525

00:54:58.515 --> 00:54:59.094 the GUI.  
NOTE Confidence: 0.98879725

00:54:59.955 --> 00:55:01.315 Let's say that you're interested  
NOTE Confidence: 0.98879725

00:55:01.315 --> 00:55:03.094 in imaging. You can select  
NOTE Confidence: 0.98879725

00:55:03.235 --> 00:55:04.695 your clinical images  
NOTE Confidence: 0.9853726

00:55:05.395 --> 00:55:06.355 based on a set of  
NOTE Confidence: 0.9853726

00:55:06.355 --> 00:55:07.715 medical record numbers, a set  
NOTE Confidence: 0.9853726

00:55:07.715 --> 00:55:08.775 of accession numbers,  
NOTE Confidence: 0.93473464

00:55:09.230 --> 00:55:10.750 a bulk upload of IDs  
NOTE Confidence: 0.93473464

00:55:10.750 --> 00:55:11.469 if you have a very  
NOTE Confidence: 0.93473464

00:55:11.469 --> 00:55:12.910 large number, or or a  
NOTE Confidence: 0.93473464

00:55:12.910 --> 00:55:14.130 predefined cohort.  
NOTE Confidence: 0.9965585

00:55:14.750 --> 00:55:15.630 And that's one of the  
NOTE Confidence: 0.9965585

00:55:15.630 --> 00:55:16.130 really,

NOTE Confidence: 0.9966752  
00:55:16.589 --> 00:55:18.109 powerful things we have in  
NOTE Confidence: 0.9966752  
00:55:18.109 --> 00:55:18.609 Camino.  
NOTE Confidence: 0.9922115  
00:55:19.150 --> 00:55:20.270 We have a number of  
NOTE Confidence: 0.9922115  
00:55:20.270 --> 00:55:23.390 cohorts defined based on computed  
NOTE Confidence: 0.9922115  
00:55:23.390 --> 00:55:23.890 phenotypes.  
NOTE Confidence: 0.9995933  
00:55:24.714 --> 00:55:25.214 And  
NOTE Confidence: 0.9369607  
00:55:25.675 --> 00:55:27.915 if there's a cohort phenotype  
NOTE Confidence: 0.9369607  
00:55:27.915 --> 00:55:29.434 you need that isn't in  
NOTE Confidence: 0.9369607  
00:55:29.434 --> 00:55:30.954 CHIP, we can that we  
NOTE Confidence: 0.9369607  
00:55:30.954 --> 00:55:32.474 can easily add it. And  
NOTE Confidence: 0.9369607  
00:55:32.474 --> 00:55:33.835 cohorts provide a sort of  
NOTE Confidence: 0.9369607  
00:55:33.835 --> 00:55:35.375 a slicer, dicer style,  
NOTE Confidence: 0.9822485  
00:55:36.155 --> 00:55:37.434 statistics page so you can  
NOTE Confidence: 0.9822485  
00:55:37.434 --> 00:55:38.930 actually see what, you know,  
NOTE Confidence: 0.9822485  
00:55:38.930 --> 00:55:40.630 what the the salient characteristics  
NOTE Confidence: 0.9822485

00:55:40.690 --> 00:55:41.989 of your cohort is.  
NOTE Confidence: 0.99746126

00:55:48.290 --> 00:55:49.670 We've mentioned VDI.  
NOTE Confidence: 0.9999392

00:55:50.610 --> 00:55:51.110 VDI  
NOTE Confidence: 0.945191

00:55:51.489 --> 00:55:51.989 complements  
NOTE Confidence: 0.9524579

00:55:52.505 --> 00:55:53.005 Camino  
NOTE Confidence: 0.98144484

00:55:53.465 --> 00:55:54.725 environments nicely because,  
NOTE Confidence: 0.95116764

00:55:55.185 --> 00:55:56.905 you know, VDI being a  
NOTE Confidence: 0.95116764

00:55:56.905 --> 00:55:58.445 virtual Windows desktop,  
NOTE Confidence: 0.9851628

00:56:00.425 --> 00:56:01.785 and I should emphasize, it's  
NOTE Confidence: 0.9851628

00:56:01.785 --> 00:56:03.385 not chip, but it's chip  
NOTE Confidence: 0.9851628

00:56:03.385 --> 00:56:05.289 adjacent. So it works with  
NOTE Confidence: 0.9851628

00:56:05.289 --> 00:56:06.410 chip, but it's not like,  
NOTE Confidence: 0.9851628

00:56:06.410 --> 00:56:07.849 our group doesn't maintain it.  
NOTE Confidence: 0.9851628

00:56:07.849 --> 00:56:09.210 This is something that desktop  
NOTE Confidence: 0.9851628

00:56:09.210 --> 00:56:10.270 engineering maintains.  
NOTE Confidence: 0.99971867

00:56:10.809 --> 00:56:11.710 All researchers



NOTE Confidence: 0.9997269  
00:56:12.010 --> 00:56:12.829 get access  
NOTE Confidence: 0.90114546  
00:56:13.289 --> 00:56:14.989 to the Yale Research VDI.  
NOTE Confidence: 0.82722485  
00:56:15.770 --> 00:56:16.089 And,  
NOTE Confidence: 0.966279  
00:56:17.555 --> 00:56:18.555 so the,  
NOTE Confidence: 0.98194164  
00:56:18.995 --> 00:56:19.955 VDI, as I said, and  
NOTE Confidence: 0.98194164  
00:56:19.955 --> 00:56:20.435 and,  
NOTE Confidence: 0.9743998  
00:56:20.755 --> 00:56:22.435 Camino environments complement each other.  
NOTE Confidence: 0.9743998  
00:56:22.435 --> 00:56:23.875 Camino environments have a lot  
NOTE Confidence: 0.9743998  
00:56:23.875 --> 00:56:25.715 of raw compute power, but  
NOTE Confidence: 0.9743998  
00:56:25.715 --> 00:56:26.695 they don't have,  
NOTE Confidence: 0.98483115  
00:56:27.395 --> 00:56:28.435 a lot of nice GUI  
NOTE Confidence: 0.98483115  
00:56:28.435 --> 00:56:28.935 tools.  
NOTE Confidence: 0.97953093  
00:56:29.475 --> 00:56:30.695 Conversely, VDI,  
NOTE Confidence: 0.976882  
00:56:31.930 --> 00:56:33.850 with Windows doesn't have the  
NOTE Confidence: 0.976882  
00:56:33.850 --> 00:56:35.930 data processing power of Camino  
NOTE Confidence: 0.976882

00:56:35.930 --> 00:56:36.590 and PySpark,  
NOTE Confidence: 0.9963169

00:56:36.890 --> 00:56:37.770 but they have,  
NOTE Confidence: 0.9848231

00:56:38.090 --> 00:56:39.550 apps that are good for,  
NOTE Confidence: 0.93699276

00:56:40.090 --> 00:56:41.150 statistics presentation  
NOTE Confidence: 0.82952976

00:56:41.770 --> 00:56:43.690 in finished finished datasets, like  
NOTE Confidence: 0.82952976

00:56:43.690 --> 00:56:45.390 like Stata, like SAS,  
NOTE Confidence: 0.825067

00:56:46.625 --> 00:56:48.224 even, like, our studio is  
NOTE Confidence: 0.825067

00:56:48.224 --> 00:56:48.724 available.  
NOTE Confidence: 0.95714724

00:56:50.305 --> 00:56:50.785 So,  
NOTE Confidence: 0.9994385

00:56:51.665 --> 00:56:53.344 the other key thing is  
NOTE Confidence: 0.9994385

00:56:53.344 --> 00:56:53.844 that  
NOTE Confidence: 0.99317765

00:56:54.385 --> 00:56:55.825 once you have if you  
NOTE Confidence: 0.99317765

00:56:55.825 --> 00:56:57.364 are a Camino user  
NOTE Confidence: 0.9729515

00:56:57.984 --> 00:56:59.444 and a VDI user,  
NOTE Confidence: 0.9751213

00:57:00.230 --> 00:57:02.390 the team shared directory right  
NOTE Confidence: 0.9751213

00:57:02.390 --> 00:57:02.890 here

NOTE Confidence: 0.98896205  
00:57:03.510 --> 00:57:05.270 can be accessed by your  
NOTE Confidence: 0.98896205  
00:57:05.270 --> 00:57:07.270 team members from VDI. So  
NOTE Confidence: 0.98896205  
00:57:07.270 --> 00:57:08.789 let's say you've done a  
NOTE Confidence: 0.98896205  
00:57:08.789 --> 00:57:10.410 great deal of data crunching  
NOTE Confidence: 0.98896205  
00:57:10.469 --> 00:57:12.309 on some multimodal thing, and  
NOTE Confidence: 0.98896205  
00:57:12.309 --> 00:57:12.969 you've got  
NOTE Confidence: 0.9654715  
00:57:14.225 --> 00:57:15.185 you've got a certain number  
NOTE Confidence: 0.9654715  
00:57:15.185 --> 00:57:16.465 of images or you've,  
NOTE Confidence: 0.79923326  
00:57:17.265 --> 00:57:17.845 or you've,  
NOTE Confidence: 0.84009135  
00:57:18.785 --> 00:57:20.625 produced a dataset derived from  
NOTE Confidence: 0.84009135  
00:57:20.625 --> 00:57:22.625 OMOP using compute power in  
NOTE Confidence: 0.84009135  
00:57:22.625 --> 00:57:23.125 Camino,  
NOTE Confidence: 0.9806373  
00:57:23.825 --> 00:57:25.505 you any team member can  
NOTE Confidence: 0.9806373  
00:57:25.505 --> 00:57:27.500 drop that information into the  
NOTE Confidence: 0.9806373  
00:57:27.580 --> 00:57:29.200 your shared folder in Camino.  
NOTE Confidence: 0.9995344

00:57:29.660 --> 00:57:30.320 And then  
NOTE Confidence: 0.9888743  
00:57:30.700 --> 00:57:31.760 in VDI,  
NOTE Confidence: 0.9320653  
00:57:32.140 --> 00:57:33.580 you can bring up that  
NOTE Confidence: 0.9320653  
00:57:33.580 --> 00:57:34.859 folder as a as as  
NOTE Confidence: 0.9320653  
00:57:34.859 --> 00:57:36.060 if it's a Windows shared  
NOTE Confidence: 0.9320653  
00:57:36.060 --> 00:57:37.500 folder and then operate it  
NOTE Confidence: 0.9320653  
00:57:37.500 --> 00:57:38.400 on it in  
NOTE Confidence: 0.9979126  
00:57:38.700 --> 00:57:40.080 your you know, the application  
NOTE Confidence: 0.9979126  
00:57:40.220 --> 00:57:40.880 of choice.  
NOTE Confidence: 0.98851544  
00:57:42.185 --> 00:57:43.405 So you get that flexibility  
NOTE Confidence: 0.98851544  
00:57:43.545 --> 00:57:45.465 of raw compute power and,  
NOTE Confidence: 0.98851544  
00:57:45.785 --> 00:57:46.745 you know, sort of nice  
NOTE Confidence: 0.98851544  
00:57:46.745 --> 00:57:48.045 GUI tools and presentation  
NOTE Confidence: 0.9986774  
00:57:48.505 --> 00:57:49.545 through the sharing of the  
NOTE Confidence: 0.9986774  
00:57:49.545 --> 00:57:50.285 team directory.  
NOTE Confidence: 0.96742874  
00:57:54.839 --> 00:57:55.960 Now let's get on to

NOTE Confidence: 0.96742874  
00:57:55.960 --> 00:57:57.660 to large language models.  
NOTE Confidence: 0.7753797  
00:58:01.400 --> 00:58:02.680 Secure computing at Y and  
NOTE Confidence: 0.7753797  
00:58:02.680 --> 00:58:03.660 HH doesn't,  
NOTE Confidence: 0.9143919  
00:58:04.119 --> 00:58:05.319 doesn't and many of you  
NOTE Confidence: 0.9143919  
00:58:05.319 --> 00:58:06.940 have probably already encountered this.  
NOTE Confidence: 0.9762177  
00:58:07.914 --> 00:58:08.795 You can you can, you  
NOTE Confidence: 0.9762177  
00:58:08.795 --> 00:58:09.914 know, get your own account  
NOTE Confidence: 0.9762177  
00:58:09.914 --> 00:58:11.355 with OpenAI, but you can't  
NOTE Confidence: 0.9762177  
00:58:11.355 --> 00:58:12.894 necessarily do that from  
NOTE Confidence: 0.9717845  
00:58:13.275 --> 00:58:13.775 within,  
NOTE Confidence: 0.9782246  
00:58:14.075 --> 00:58:14.875 you can't do that from  
NOTE Confidence: 0.9782246  
00:58:14.875 --> 00:58:16.075 within the hospital network, and  
NOTE Confidence: 0.9782246  
00:58:16.075 --> 00:58:17.775 you certainly can't access,  
NOTE Confidence: 0.99057484  
00:58:18.795 --> 00:58:20.255 arbitrary cloud based  
NOTE Confidence: 0.98831683  
00:58:20.740 --> 00:58:22.420 large language models and computing  
NOTE Confidence: 0.98831683

00:58:22.420 --> 00:58:23.480 resources with,  
NOTE Confidence: 0.9976864  
00:58:23.940 --> 00:58:25.080 with patient data.  
NOTE Confidence: 0.9993936  
00:58:25.700 --> 00:58:26.200 So  
NOTE Confidence: 0.94875515  
00:58:26.580 --> 00:58:27.220 we have,  
NOTE Confidence: 0.9734293  
00:58:28.100 --> 00:58:29.800 developed a pretty significant,  
NOTE Confidence: 0.98275584  
00:58:30.740 --> 00:58:32.500 library of large language models  
NOTE Confidence: 0.98275584  
00:58:32.500 --> 00:58:33.400 within Chip.  
NOTE Confidence: 0.97497666  
00:58:33.875 --> 00:58:34.994 Here's the list of what  
NOTE Confidence: 0.97497666  
00:58:34.994 --> 00:58:36.295 we've got right now,  
NOTE Confidence: 0.9921945  
00:58:36.755 --> 00:58:38.115 and, you know, we are  
NOTE Confidence: 0.9921945  
00:58:38.115 --> 00:58:39.234 adding to them on a  
NOTE Confidence: 0.9921945  
00:58:39.234 --> 00:58:41.575 regular basis. So if you,  
NOTE Confidence: 0.9990166  
00:58:42.675 --> 00:58:44.835 have an application that requires  
NOTE Confidence: 0.9990166  
00:58:44.835 --> 00:58:46.595 a particular LLM that is  
NOTE Confidence: 0.9990166  
00:58:46.595 --> 00:58:47.415 not here,  
NOTE Confidence: 0.9515444  
00:58:48.320 --> 00:58:49.280 you can, you know, you

NOTE Confidence: 0.9515444  
00:58:49.280 --> 00:58:50.320 can ask us and we  
NOTE Confidence: 0.9515444  
00:58:50.320 --> 00:58:51.400 will you know, there's some  
NOTE Confidence: 0.9515444  
00:58:51.520 --> 00:58:52.800 a little bit of security  
NOTE Confidence: 0.9515444  
00:58:52.800 --> 00:58:53.920 review, but we'll be happy  
NOTE Confidence: 0.9515444  
00:58:53.920 --> 00:58:55.200 to include it in our,  
NOTE Confidence: 0.9988039  
00:58:55.520 --> 00:58:57.300 library of large language models.  
NOTE Confidence: 0.9966891  
00:59:03.195 --> 00:59:05.595 So the one the one  
NOTE Confidence: 0.9966891  
00:59:05.595 --> 00:59:06.815 method of accessing  
NOTE Confidence: 0.9819771  
00:59:07.355 --> 00:59:09.035 large language models in Camino  
NOTE Confidence: 0.9819771  
00:59:09.035 --> 00:59:11.135 is through a Camino environment  
NOTE Confidence: 0.9819771  
00:59:11.195 --> 00:59:12.575 with a dedicated GPU.  
NOTE Confidence: 0.94365644  
00:59:14.270 --> 00:59:15.010 If you  
NOTE Confidence: 0.9971757  
00:59:15.390 --> 00:59:15.890 reserve  
NOTE Confidence: 0.9532174  
00:59:16.350 --> 00:59:17.950 GPUs in Camino and there's  
NOTE Confidence: 0.9532174  
00:59:17.950 --> 00:59:18.609 a formal,  
NOTE Confidence: 0.98455906

00:59:19.070 --> 00:59:20.450 GPU request process,  
NOTE Confidence: 0.9886586

00:59:20.830 --> 00:59:23.150 you can have GPUs allocated  
NOTE Confidence: 0.9886586

00:59:23.150 --> 00:59:24.670 to you for a certain  
NOTE Confidence: 0.9886586

00:59:24.670 --> 00:59:25.650 period of time.  
NOTE Confidence: 0.9194052

00:59:27.195 --> 00:59:28.415 The obvious advantages  
NOTE Confidence: 0.9856796

00:59:29.275 --> 00:59:30.555 are that you get a  
NOTE Confidence: 0.9856796

00:59:30.555 --> 00:59:31.995 lot of flexibility because you  
NOTE Confidence: 0.9856796

00:59:31.995 --> 00:59:32.955 can say, well, I've got  
NOTE Confidence: 0.9856796

00:59:32.955 --> 00:59:34.555 my GPU. I'm gonna try  
NOTE Confidence: 0.9856796

00:59:34.715 --> 00:59:35.695 I'm gonna run  
NOTE Confidence: 0.95326746

00:59:36.075 --> 00:59:36.575 my,  
NOTE Confidence: 0.9703301

00:59:37.515 --> 00:59:38.955 I'm gonna operate on my  
NOTE Confidence: 0.9703301

00:59:38.955 --> 00:59:39.755 dataset with,  
NOTE Confidence: 0.95458776

00:59:40.380 --> 00:59:41.920 two or three different GPUs  
NOTE Confidence: 0.95458776

00:59:41.980 --> 00:59:42.859 in you know, over the  
NOTE Confidence: 0.95458776

00:59:42.859 --> 00:59:43.660 course of a few days



NOTE Confidence: 0.95458776  
00:59:43.660 --> 00:59:44.700 and see or sorry. Two  
NOTE Confidence: 0.95458776  
00:59:44.700 --> 00:59:45.839 or three different LLMs  
NOTE Confidence: 0.9513676  
00:59:46.140 --> 00:59:46.859 and see,  
NOTE Confidence: 0.9946186  
00:59:47.339 --> 00:59:48.319 how they differ.  
NOTE Confidence: 0.9864006  
00:59:49.900 --> 00:59:51.420 You get maximum compute power  
NOTE Confidence: 0.9864006  
00:59:51.420 --> 00:59:52.460 because while you have the  
NOTE Confidence: 0.9864006  
00:59:52.460 --> 00:59:53.420 GPU, it is yours and  
NOTE Confidence: 0.9864006  
00:59:53.420 --> 00:59:54.240 yours alone.  
NOTE Confidence: 0.97903776  
00:59:55.505 --> 00:59:57.425 Really good for multimodal studies  
NOTE Confidence: 0.97903776  
00:59:57.425 --> 00:59:58.865 because, you know, many we  
NOTE Confidence: 0.97903776  
00:59:58.865 --> 00:59:59.825 know of at least a  
NOTE Confidence: 0.97903776  
00:59:59.825 --> 01:00:01.025 couple of research groups that  
NOTE Confidence: 0.97903776  
01:00:01.025 --> 01:00:03.265 are doing studies involving OMOP  
NOTE Confidence: 0.97903776  
01:00:03.265 --> 01:00:05.345 data and clinical image data  
NOTE Confidence: 0.97903776  
01:00:05.345 --> 01:00:07.205 and possibly other things, and  
NOTE Confidence: 0.97903776

01:00:07.425 --> 01:00:08.785 it's very useful to have  
NOTE Confidence: 0.97903776

01:00:08.785 --> 01:00:10.385 the the GPU available for  
NOTE Confidence: 0.97903776

01:00:10.385 --> 01:00:10.885 that.  
NOTE Confidence: 0.990568

01:00:12.540 --> 01:00:13.040 Disadvantages  
NOTE Confidence: 0.9743198

01:00:13.580 --> 01:00:14.540 are kind of what you'd  
NOTE Confidence: 0.9743198

01:00:14.540 --> 01:00:15.740 expect, that there's a higher  
NOTE Confidence: 0.9743198

01:00:15.740 --> 01:00:16.240 cost.  
NOTE Confidence: 0.99118966

01:00:17.180 --> 01:00:18.620 Once you reserve a GPU  
NOTE Confidence: 0.99118966

01:00:18.620 --> 01:00:20.380 and that reservation is accepted,  
NOTE Confidence: 0.99118966

01:00:20.380 --> 01:00:21.340 the meter is running, and  
NOTE Confidence: 0.99118966

01:00:21.340 --> 01:00:22.640 then you're gonna be responsible  
NOTE Confidence: 0.99118966

01:00:22.700 --> 01:00:24.000 for paying for that resource.  
NOTE Confidence: 0.9932093

01:00:25.565 --> 01:00:26.945 It's a resource bottleneck  
NOTE Confidence: 0.9610866

01:00:27.325 --> 01:00:28.685 because if you have a  
NOTE Confidence: 0.9610866

01:00:28.685 --> 01:00:29.185 GPU,  
NOTE Confidence: 0.9002217

01:00:30.285 --> 01:00:31.505 reserved and you actually,

NOTE Confidence: 0.9945281  
01:00:32.445 --> 01:00:34.305 spun up an environment with  
NOTE Confidence: 0.9646162  
01:00:34.685 --> 01:00:35.905 four h one hundreds,  
NOTE Confidence: 0.9852284  
01:00:36.285 --> 01:00:37.405 those h one hundreds are  
NOTE Confidence: 0.9852284  
01:00:37.405 --> 01:00:38.605 not available to anyone else.  
NOTE Confidence: 0.9852284  
01:00:38.605 --> 01:00:39.485 They are not a shared  
NOTE Confidence: 0.9852284  
01:00:39.485 --> 01:00:40.690 resource. They are tied to  
NOTE Confidence: 0.9852284  
01:00:40.690 --> 01:00:41.970 an environment, and they cannot  
NOTE Confidence: 0.9852284  
01:00:41.970 --> 01:00:43.270 be used by anybody else  
NOTE Confidence: 0.9852284  
01:00:43.330 --> 01:00:45.270 until your environment has stopped.  
NOTE Confidence: 0.9317523  
01:00:47.650 --> 01:00:49.490 Also, they require you doing  
NOTE Confidence: 0.9317523  
01:00:49.490 --> 01:00:50.610 things this way require,  
NOTE Confidence: 0.9972861  
01:00:51.010 --> 01:00:52.790 requires more programming expertise.  
NOTE Confidence: 0.9578269  
01:00:53.694 --> 01:00:54.974 For some people, that might  
NOTE Confidence: 0.9578269  
01:00:54.974 --> 01:00:56.494 not be desirable for simpler  
NOTE Confidence: 0.9578269  
01:00:56.494 --> 01:00:57.694 use cases. Like, you may  
NOTE Confidence: 0.9578269

01:00:57.694 --> 01:00:59.155 simply be wanting to,  
NOTE Confidence: 0.87308425

01:01:00.734 --> 01:01:01.775 sort of, you know, ex  
NOTE Confidence: 0.9464484

01:01:02.415 --> 01:01:04.335 yeah, exchange prompts and and  
NOTE Confidence: 0.9464484

01:01:04.335 --> 01:01:05.795 prompt responses with  
NOTE Confidence: 0.899276

01:01:06.260 --> 01:01:07.460 with an LLM in the  
NOTE Confidence: 0.899276

01:01:07.460 --> 01:01:08.660 way that we interact with,  
NOTE Confidence: 0.899276

01:01:08.660 --> 01:01:10.200 you know, open a OpenAI  
NOTE Confidence: 0.899276

01:01:10.339 --> 01:01:11.240 and chat GPT.  
NOTE Confidence: 0.9693959

01:01:15.059 --> 01:01:15.720 Let's see.  
NOTE Confidence: 0.99173844

01:01:16.420 --> 01:01:17.700 We have an example. We  
NOTE Confidence: 0.99173844

01:01:17.700 --> 01:01:19.619 have a sample notebook and  
NOTE Confidence: 0.99173844

01:01:19.619 --> 01:01:21.619 project for anybody who wants  
NOTE Confidence: 0.99173844

01:01:21.619 --> 01:01:24.015 to try using dedicated GPU.  
NOTE Confidence: 0.80439043

01:01:24.795 --> 01:01:27.435 Vincent Zhang of, Hua's team  
NOTE Confidence: 0.80439043

01:01:27.435 --> 01:01:27.915 wrote,  
NOTE Confidence: 0.8689144

01:01:28.235 --> 01:01:29.375 a Jupyter notebook

NOTE Confidence: 0.9436771  
01:01:29.755 --> 01:01:31.295 that it does a simple,  
NOTE Confidence: 0.9716747  
01:01:31.995 --> 01:01:33.435 does a demo demo of  
NOTE Confidence: 0.9716747  
01:01:33.435 --> 01:01:35.375 simple inference and classification.  
NOTE Confidence: 0.98397815  
01:01:36.130 --> 01:01:37.490 And I took that notebook  
NOTE Confidence: 0.98397815  
01:01:37.490 --> 01:01:38.770 and adapted it into a  
NOTE Confidence: 0.98397815  
01:01:38.770 --> 01:01:40.690 fully self contained repo in  
NOTE Confidence: 0.98397815  
01:01:40.690 --> 01:01:41.910 our GitHub enterprise,  
NOTE Confidence: 0.8842443  
01:01:43.490 --> 01:01:43.990 installation.  
NOTE Confidence: 0.99195224  
01:01:44.530 --> 01:01:45.410 And it it's,  
NOTE Confidence: 0.9989586  
01:01:46.050 --> 01:01:47.270 if you have an environment  
NOTE Confidence: 0.9989586  
01:01:47.330 --> 01:01:48.790 with at least one GPU,  
NOTE Confidence: 0.9603191  
01:01:49.385 --> 01:01:50.505 you can run this Jupyter  
NOTE Confidence: 0.9603191  
01:01:50.505 --> 01:01:52.265 notebook and then tailor it  
NOTE Confidence: 0.9603191  
01:01:52.265 --> 01:01:52.845 to your,  
NOTE Confidence: 0.9837999  
01:01:53.145 --> 01:01:54.425 to your requirements. You can  
NOTE Confidence: 0.9837999

01:01:54.425 --> 01:01:55.785 customize your prompts. You can

NOTE Confidence: 0.9837999

01:01:55.785 --> 01:01:56.905 change the data that's being

NOTE Confidence: 0.9837999

01:01:56.905 --> 01:01:57.785 fed in. You can see

NOTE Confidence: 0.9837999

01:01:57.785 --> 01:01:59.625 how the how the, how

NOTE Confidence: 0.9837999

01:01:59.625 --> 01:02:01.464 the LLM behaves. So that

NOTE Confidence: 0.9837999

01:02:01.464 --> 01:02:02.505 may be a very useful

NOTE Confidence: 0.9837999

01:02:02.505 --> 01:02:03.785 thing if you're looking to

NOTE Confidence: 0.9837999

01:02:03.785 --> 01:02:04.444 get started.

NOTE Confidence: 0.9803942

01:02:08.530 --> 01:02:09.990 The more efficient way,

NOTE Confidence: 0.98379046

01:02:10.530 --> 01:02:11.890 or a more effective way

NOTE Confidence: 0.98379046

01:02:11.890 --> 01:02:12.870 to get at,

NOTE Confidence: 0.9656339

01:02:14.450 --> 01:02:16.370 LLMs and GPUs is is

NOTE Confidence: 0.9656339

01:02:16.370 --> 01:02:17.730 doing it via software as

NOTE Confidence: 0.9656339

01:02:17.730 --> 01:02:18.924 a service, which I know

NOTE Confidence: 0.9656339

01:02:18.924 --> 01:02:19.884 Vincent and,

NOTE Confidence: 0.9954124

01:02:20.365 --> 01:02:21.565 other colleagues are gonna be

NOTE Confidence: 0.9954124  
01:02:21.565 --> 01:02:22.444 talking about in a lot  
NOTE Confidence: 0.9954124  
01:02:22.444 --> 01:02:23.825 more detail this afternoon.  
NOTE Confidence: 0.9506263  
01:02:24.845 --> 01:02:26.204 But just from the diagram,  
NOTE Confidence: 0.9506263  
01:02:26.204 --> 01:02:27.244 you can see how it  
NOTE Confidence: 0.9506263  
01:02:27.244 --> 01:02:28.204 kind of makes,  
NOTE Confidence: 0.96348476  
01:02:28.845 --> 01:02:30.865 adds flexibility because you have  
NOTE Confidence: 0.96348476  
01:02:31.005 --> 01:02:32.365 one container with a number  
NOTE Confidence: 0.96348476  
01:02:32.365 --> 01:02:33.025 of GPUs,  
NOTE Confidence: 0.98123074  
01:02:34.029 --> 01:02:36.430 multiple teams and multiple users  
NOTE Confidence: 0.98123074  
01:02:36.430 --> 01:02:37.710 can be sending queries to  
NOTE Confidence: 0.98123074  
01:02:37.710 --> 01:02:39.009 it at the same time.  
NOTE Confidence: 0.9882549  
01:02:40.589 --> 01:02:42.769 Containers like the Kiwi system  
NOTE Confidence: 0.9882549  
01:02:42.829 --> 01:02:45.150 can queue requests and queue  
NOTE Confidence: 0.9882549  
01:02:45.150 --> 01:02:45.650 results  
NOTE Confidence: 0.9999278  
01:02:46.125 --> 01:02:46.865 so that  
NOTE Confidence: 0.9844972

01:02:47.165 --> 01:02:48.945 you're not if you are  
NOTE Confidence: 0.9844972

01:02:49.005 --> 01:02:50.445 issuing a query, you're not  
NOTE Confidence: 0.9844972

01:02:50.605 --> 01:02:51.485 you don't get a busy  
NOTE Confidence: 0.9844972

01:02:51.485 --> 01:02:53.245 signal if the if there's  
NOTE Confidence: 0.9844972

01:02:53.245 --> 01:02:54.285 a lot going on, but  
NOTE Confidence: 0.9844972

01:02:54.285 --> 01:02:55.165 you may have to wait  
NOTE Confidence: 0.9844972

01:02:55.165 --> 01:02:55.985 a little bit.  
NOTE Confidence: 0.6660204

01:02:58.045 --> 01:02:58.365 The,  
NOTE Confidence: 0.98160076

01:02:59.319 --> 01:03:01.240 it creates some obvious improvements  
NOTE Confidence: 0.98160076

01:03:01.240 --> 01:03:02.539 in efficiency because,  
NOTE Confidence: 0.9927394

01:03:03.480 --> 01:03:04.760 with many people querying a  
NOTE Confidence: 0.9927394

01:03:04.760 --> 01:03:06.039 GPU, the GPU can be  
NOTE Confidence: 0.9927394

01:03:06.039 --> 01:03:06.940 running continuously,  
NOTE Confidence: 0.9734364

01:03:08.119 --> 01:03:09.640 rather than sort of in  
NOTE Confidence: 0.9734364

01:03:09.640 --> 01:03:10.760 a stop start way than  
NOTE Confidence: 0.9734364

01:03:10.760 --> 01:03:11.660 having somebody



NOTE Confidence: 0.9917276  
01:03:11.960 --> 01:03:13.559 with a dedicated GPU run  
NOTE Confidence: 0.9917276  
01:03:13.559 --> 01:03:14.619 a couple of things,  
NOTE Confidence: 0.97773296  
01:03:15.115 --> 01:03:16.235 stop, wait a few hours  
NOTE Confidence: 0.97773296  
01:03:16.235 --> 01:03:17.115 or a few days while  
NOTE Confidence: 0.97773296  
01:03:17.115 --> 01:03:18.495 nobody else can use it.  
NOTE Confidence: 0.9885188  
01:03:19.515 --> 01:03:21.055 So we have we've  
NOTE Confidence: 0.99321973  
01:03:21.515 --> 01:03:23.675 just begun to roll out  
NOTE Confidence: 0.99321973  
01:03:23.675 --> 01:03:24.415 the Kiwi  
NOTE Confidence: 0.92446184  
01:03:25.675 --> 01:03:26.175 containerized  
NOTE Confidence: 0.81447357  
01:03:26.475 --> 01:03:27.855 application in Chip.  
NOTE Confidence: 0.97271127  
01:03:28.315 --> 01:03:29.930 It will be I think  
NOTE Confidence: 0.97271127  
01:03:29.930 --> 01:03:30.890 we're gonna be doing some  
NOTE Confidence: 0.97271127  
01:03:30.890 --> 01:03:32.250 beta testing of it in  
NOTE Confidence: 0.97271127  
01:03:32.250 --> 01:03:33.850 the test environment. Soon, we're  
NOTE Confidence: 0.97271127  
01:03:33.850 --> 01:03:35.370 rolling out to production. And  
NOTE Confidence: 0.97271127

01:03:35.370 --> 01:03:36.330 then I believe we have  
NOTE Confidence: 0.97271127

01:03:36.330 --> 01:03:36.830 other,  
NOTE Confidence: 0.921893

01:03:37.850 --> 01:03:38.350 other,  
NOTE Confidence: 0.9344115

01:03:38.970 --> 01:03:40.810 SaaS versions of,  
NOTE Confidence: 0.8980403

01:03:41.290 --> 01:03:42.570 GPUs and LMs,  
NOTE Confidence: 0.9484636

01:03:43.135 --> 01:03:44.175 that we'll be rolling out  
NOTE Confidence: 0.9484636

01:03:44.175 --> 01:03:45.055 in Chip as well to  
NOTE Confidence: 0.9484636

01:03:45.055 --> 01:03:46.115 maximize people's  
NOTE Confidence: 0.92813987

01:03:47.775 --> 01:03:49.475 access to to those resources.  
NOTE Confidence: 0.98444855

01:03:51.295 --> 01:03:52.975 And I think that is  
NOTE Confidence: 0.98444855

01:03:52.975 --> 01:03:54.655 everything that I have to  
NOTE Confidence: 0.98444855

01:03:54.655 --> 01:03:57.155 say about Chip and SAFE.  
NOTE Confidence: 0.97807413

01:03:57.930 --> 01:03:59.210 So thank you for bearing  
NOTE Confidence: 0.97807413

01:03:59.210 --> 01:03:59.849 with me, and,  
NOTE Confidence: 0.90681857

01:04:00.490 --> 01:04:01.770 happy to take any questions  
NOTE Confidence: 0.90681857

01:04:01.770 --> 01:04:02.569 for a couple of minutes

NOTE Confidence: 0.90681857  
01:04:02.569 --> 01:04:03.790 if anyone has any.  
NOTE Confidence: 0.92841005  
01:04:11.770 --> 01:04:12.270 Thanks.  
NOTE Confidence: 0.5871424  
01:04:19.965 --> 01:04:20.945 There are more time.  
NOTE Confidence: 0.5786636  
01:04:21.325 --> 01:04:21.825 I'll  
NOTE Confidence: 0.83722246  
01:04:25.165 --> 01:04:26.205 so I'll use a data  
NOTE Confidence: 0.83722246  
01:04:26.205 --> 01:04:27.425 science software engineer.  
NOTE Confidence: 0.8797889  
01:04:27.725 --> 01:04:29.265 I'll move from you.  
NOTE Confidence: 0.85752106  
01:04:41.510 --> 01:04:42.890 Yeah. Good afternoon, everyone.  
NOTE Confidence: 0.8840816  
01:04:44.395 --> 01:04:45.455 I'm Al Pacelle.  
NOTE Confidence: 0.99246174  
01:04:45.915 --> 01:04:47.595 I have I'm probably the  
NOTE Confidence: 0.99246174  
01:04:47.595 --> 01:04:49.115 newest member of the team,  
NOTE Confidence: 0.99246174  
01:04:49.115 --> 01:04:49.755 I think,  
NOTE Confidence: 0.99989414  
01:04:51.035 --> 01:04:52.095 almost a year  
NOTE Confidence: 0.978017  
01:04:52.475 --> 01:04:53.455 with Chip.  
NOTE Confidence: 0.99723166  
01:04:54.955 --> 01:04:56.235 Very exciting for me. I  
NOTE Confidence: 0.99723166

01:04:56.235 --> 01:04:57.215 came from UnitedHealthcare,  
NOTE Confidence: 0.9719213

01:04:58.075 --> 01:05:00.010 after twenty seven years, and,  
NOTE Confidence: 0.80638176

01:05:00.569 --> 01:05:01.069 it  
NOTE Confidence: 0.98920393

01:05:01.930 --> 01:05:03.390 the data science information  
NOTE Confidence: 0.9945335

01:05:03.690 --> 01:05:05.609 has been, really exciting to  
NOTE Confidence: 0.9945335

01:05:05.609 --> 01:05:06.809 get into and start to  
NOTE Confidence: 0.9945335

01:05:06.809 --> 01:05:07.470 work with.  
NOTE Confidence: 0.92419505

01:05:09.289 --> 01:05:10.250 So I start wanted to  
NOTE Confidence: 0.92419505

01:05:10.250 --> 01:05:11.049 start off with a couple  
NOTE Confidence: 0.92419505

01:05:11.049 --> 01:05:12.349 of good reasons to use  
NOTE Confidence: 0.80123746

01:05:12.730 --> 01:05:13.230 Chip.  
NOTE Confidence: 0.9544622

01:05:16.125 --> 01:05:16.785 I think  
NOTE Confidence: 0.9949382

01:05:17.325 --> 01:05:18.845 kind of a resounding message  
NOTE Confidence: 0.9949382

01:05:18.845 --> 01:05:21.005 that everybody has spoken about  
NOTE Confidence: 0.9949382

01:05:21.005 --> 01:05:22.145 so far has been  
NOTE Confidence: 0.99936867

01:05:22.445 --> 01:05:24.065 the availability of data.

NOTE Confidence: 0.97760814  
01:05:24.605 --> 01:05:26.205 I think Chip has probably  
NOTE Confidence: 0.97760814  
01:05:26.205 --> 01:05:27.265 one of the best,  
NOTE Confidence: 0.99939  
01:05:28.530 --> 01:05:29.990 amounts of data available.  
NOTE Confidence: 0.9994363  
01:05:30.290 --> 01:05:31.990 There's three point one million  
NOTE Confidence: 0.9994363  
01:05:32.130 --> 01:05:32.630 individuals  
NOTE Confidence: 0.9741321  
01:05:32.930 --> 01:05:33.830 that have been,  
NOTE Confidence: 0.9998078  
01:05:34.850 --> 01:05:35.350 to  
NOTE Confidence: 0.9938025  
01:05:35.810 --> 01:05:37.650 the hospital or or in  
NOTE Confidence: 0.9938025  
01:05:37.650 --> 01:05:38.310 the system,  
NOTE Confidence: 0.9994629  
01:05:39.330 --> 01:05:39.830 since  
NOTE Confidence: 0.9960646  
01:05:40.450 --> 01:05:42.150 twenty twelve, twenty thirteen.  
NOTE Confidence: 0.945724  
01:05:44.885 --> 01:05:46.085 All that data is HIPAA  
NOTE Confidence: 0.945724  
01:05:46.085 --> 01:05:46.585 compliant.  
NOTE Confidence: 0.9753773  
01:05:47.205 --> 01:05:49.045 So, you know, we have  
NOTE Confidence: 0.9753773  
01:05:49.045 --> 01:05:50.325 pretty much everything that,  
NOTE Confidence: 0.99010926

01:05:50.885 --> 01:05:52.425 everything you could possibly want.

NOTE Confidence: 0.98189294

01:05:53.205 --> 01:05:53.705 It's

NOTE Confidence: 0.9623077

01:05:54.405 --> 01:05:55.765 data from Epic. I think

NOTE Confidence: 0.9623077

01:05:55.765 --> 01:05:57.525 we mentioned the the path

NOTE Confidence: 0.9623077

01:05:57.525 --> 01:05:58.025 from

NOTE Confidence: 0.8949449

01:06:00.740 --> 01:06:02.100 the the path basically from

NOTE Confidence: 0.8949449

01:06:02.100 --> 01:06:03.060 Epic all the way to

NOTE Confidence: 0.8949449

01:06:03.060 --> 01:06:03.560 Caboodle.

NOTE Confidence: 0.9951466

01:06:05.380 --> 01:06:06.740 And we also have imaging

NOTE Confidence: 0.9951466

01:06:06.740 --> 01:06:07.240 data

NOTE Confidence: 0.9554289

01:06:07.540 --> 01:06:09.240 in the vendor neutral archive.

NOTE Confidence: 0.99940455

01:06:09.700 --> 01:06:11.080 So you can get images

NOTE Confidence: 0.9974774

01:06:11.460 --> 01:06:13.140 and data from data off

NOTE Confidence: 0.9974774

01:06:13.140 --> 01:06:14.385 those images as well.

NOTE Confidence: 0.8730165

01:06:18.785 --> 01:06:19.445 The thing

NOTE Confidence: 0.9572257

01:06:19.745 --> 01:06:21.105 Nate mentioned that we have

NOTE Confidence: 0.9572257  
01:06:21.105 --> 01:06:22.165 a bunch of preload  
NOTE Confidence: 0.9851825  
01:06:22.465 --> 01:06:24.245 preloaded large language models,  
NOTE Confidence: 0.9764657  
01:06:24.705 --> 01:06:25.185 and,  
NOTE Confidence: 0.9734343  
01:06:25.985 --> 01:06:27.425 Nate showed that information as  
NOTE Confidence: 0.9734343  
01:06:27.425 --> 01:06:28.440 well. I'm gonna I was  
NOTE Confidence: 0.9734343  
01:06:28.440 --> 01:06:29.560 gonna demo that, but,  
NOTE Confidence: 0.99531573  
01:06:30.680 --> 01:06:32.380 I'll I'll hit the actual,  
NOTE Confidence: 0.98426735  
01:06:33.720 --> 01:06:35.000 the actual repository so you  
NOTE Confidence: 0.98426735  
01:06:35.000 --> 01:06:36.060 can see them live.  
NOTE Confidence: 0.6227778  
01:06:39.320 --> 01:06:39.820 And  
NOTE Confidence: 0.9684852  
01:06:40.305 --> 01:06:41.505 it's a high speed compute  
NOTE Confidence: 0.9684852  
01:06:41.505 --> 01:06:43.105 environment. I think Nate's numbers  
NOTE Confidence: 0.9684852  
01:06:43.105 --> 01:06:44.484 are probably better than MindMiner,  
NOTE Confidence: 0.9343105  
01:06:45.425 --> 01:06:46.244 I think from  
NOTE Confidence: 0.86811036  
01:06:46.704 --> 01:06:47.845 couple years ago.  
NOTE Confidence: 0.9895015

01:06:48.145 --> 01:06:48.645 But,  
NOTE Confidence: 0.99553496

01:06:49.665 --> 01:06:51.365 you know, over over seventeen  
NOTE Confidence: 0.99553496

01:06:51.425 --> 01:06:52.244 hundred CPUs,  
NOTE Confidence: 0.9987378

01:06:52.625 --> 01:06:53.684 twenty eight GPUs,  
NOTE Confidence: 0.9504178

01:06:54.545 --> 01:06:56.510 petabyte of storage and change.  
NOTE Confidence: 0.9504178

01:06:56.510 --> 01:06:57.290 So all  
NOTE Confidence: 0.99582165

01:06:58.870 --> 01:07:00.090 all super good.  
NOTE Confidence: 0.93305004

01:07:04.230 --> 01:07:06.230 So Camino. Camino is a  
NOTE Confidence: 0.93305004

01:07:06.230 --> 01:07:07.830 curated data broker. It's a  
NOTE Confidence: 0.93305004

01:07:07.830 --> 01:07:08.810 front end chip.  
NOTE Confidence: 0.95265144

01:07:11.475 --> 01:07:12.995 Users get their own custom  
NOTE Confidence: 0.95265144

01:07:12.995 --> 01:07:13.895 compute environment.  
NOTE Confidence: 0.819155

01:07:14.195 --> 01:07:15.155 Like we mentioned, it was  
NOTE Confidence: 0.819155

01:07:15.155 --> 01:07:15.655 Linux.  
NOTE Confidence: 0.95140773

01:07:18.515 --> 01:07:20.375 We also provide Jupyter Notebooks  
NOTE Confidence: 0.95140773

01:07:20.435 --> 01:07:22.055 as an interface for coding.



NOTE Confidence: 0.95140773  
01:07:22.195 --> 01:07:23.315 So you can code in  
NOTE Confidence: 0.95140773  
01:07:23.315 --> 01:07:23.815 Python  
NOTE Confidence: 0.98237836  
01:07:24.270 --> 01:07:25.090 three, PySpark,  
NOTE Confidence: 0.99171466  
01:07:25.550 --> 01:07:26.050 PyTorch,  
NOTE Confidence: 0.8526741  
01:07:27.710 --> 01:07:29.090 and Nate's favorite, R.  
NOTE Confidence: 0.97580135  
01:07:34.430 --> 01:07:36.190 Amino comes preloaded with Python  
NOTE Confidence: 0.97580135  
01:07:36.190 --> 01:07:38.165 packages. We have a pretty  
NOTE Confidence: 0.97580135  
01:07:38.165 --> 01:07:40.345 good number of common packages,  
NOTE Confidence: 0.98209274  
01:07:41.125 --> 01:07:43.125 as well as our analytics  
NOTE Confidence: 0.98209274  
01:07:43.125 --> 01:07:44.345 packages as well.  
NOTE Confidence: 0.99070096  
01:07:45.765 --> 01:07:47.365 There's also the ability to  
NOTE Confidence: 0.99070096  
01:07:47.365 --> 01:07:49.685 add additional packages. So if  
NOTE Confidence: 0.99070096  
01:07:49.685 --> 01:07:51.270 you're if you have questions  
NOTE Confidence: 0.99070096  
01:07:51.330 --> 01:07:53.330 about whether your favorite package  
NOTE Confidence: 0.99070096  
01:07:53.330 --> 01:07:54.630 is available or not,  
NOTE Confidence: 0.9952848

01:07:55.250 --> 01:07:56.330 I will show you in  
NOTE Confidence: 0.9952848

01:07:56.330 --> 01:07:57.410 a few minutes how to  
NOTE Confidence: 0.9952848

01:07:57.410 --> 01:07:59.170 actually ask me to add  
NOTE Confidence: 0.9952848

01:07:59.170 --> 01:07:59.910 more packages.  
NOTE Confidence: 0.9364664

01:08:00.210 --> 01:08:01.570 So and same goes for  
NOTE Confidence: 0.9364664

01:08:01.570 --> 01:08:02.070 LLMs.  
NOTE Confidence: 0.99653107

01:08:03.090 --> 01:08:03.890 We have a bunch of  
NOTE Confidence: 0.99653107

01:08:03.890 --> 01:08:04.950 preloaded LLMs.  
NOTE Confidence: 0.97320706

01:08:06.085 --> 01:08:07.445 I think we have a  
NOTE Confidence: 0.97320706

01:08:07.445 --> 01:08:08.265 pretty nice,  
NOTE Confidence: 0.9876237

01:08:09.445 --> 01:08:11.125 cross section of them. But  
NOTE Confidence: 0.9876237

01:08:11.125 --> 01:08:12.325 if you find something that  
NOTE Confidence: 0.9876237

01:08:12.325 --> 01:08:14.025 you're interested in that  
NOTE Confidence: 0.9978048

01:08:14.805 --> 01:08:15.785 you really want,  
NOTE Confidence: 0.97687614

01:08:17.365 --> 01:08:18.165 you can put in a  
NOTE Confidence: 0.97687614

01:08:18.165 --> 01:08:19.449 request and talk to me,

NOTE Confidence: 0.97687614  
01:08:19.449 --> 01:08:20.250 and I will be happy  
NOTE Confidence: 0.97687614  
01:08:20.250 --> 01:08:21.050 to see if we can  
NOTE Confidence: 0.97687614  
01:08:21.050 --> 01:08:22.429 get that loaded for you.  
NOTE Confidence: 0.9944946  
01:08:23.929 --> 01:08:25.689 Also, there's more information on,  
NOTE Confidence: 0.9860684  
01:08:26.250 --> 01:08:27.229 we have a  
NOTE Confidence: 0.86416626  
01:08:27.689 --> 01:08:29.530 on the com Camino chip  
NOTE Confidence: 0.86416626  
01:08:29.530 --> 01:08:30.750 user group website.  
NOTE Confidence: 0.929624  
01:08:32.425 --> 01:08:33.945 Sorry. In that website, but  
NOTE Confidence: 0.929624  
01:08:33.945 --> 01:08:35.564 in the, Yale University  
NOTE Confidence: 0.94358397  
01:08:35.945 --> 01:08:37.865 Microsoft Teams instance, we have  
NOTE Confidence: 0.94358397  
01:08:37.865 --> 01:08:39.564 a Camino chip user group.  
NOTE Confidence: 0.94358397  
01:08:39.625 --> 01:08:40.985 And in that Camino chip  
NOTE Confidence: 0.94358397  
01:08:40.985 --> 01:08:41.805 user group,  
NOTE Confidence: 0.9649582  
01:08:42.745 --> 01:08:44.025 there's a welcome packet. It  
NOTE Confidence: 0.9649582  
01:08:44.025 --> 01:08:45.530 has all that information, the  
NOTE Confidence: 0.9649582

01:08:45.530 --> 01:08:46.510 analytics packages,  
NOTE Confidence: 0.9964721

01:08:47.450 --> 01:08:48.750 the LLMs, etcetera.  
NOTE Confidence: 0.9740691

01:08:50.090 --> 01:08:51.210 And just a little fun  
NOTE Confidence: 0.9740691

01:08:51.210 --> 01:08:51.710 fact,  
NOTE Confidence: 0.989549

01:08:52.170 --> 01:08:53.370 this picture here up on  
NOTE Confidence: 0.989549

01:08:53.370 --> 01:08:53.950 the wall,  
NOTE Confidence: 0.98998845

01:08:54.570 --> 01:08:56.110 that is our data center.  
NOTE Confidence: 0.94538754

01:08:56.489 --> 01:08:57.930 That picture came from our  
NOTE Confidence: 0.94538754

01:08:57.930 --> 01:08:58.485 data center.  
NOTE Confidence: 0.92536396

01:08:59.045 --> 01:09:00.665 I'm not sure which closet  
NOTE Confidence: 0.92536396

01:09:00.725 --> 01:09:02.485 has the LLMs in it,  
NOTE Confidence: 0.92536396

01:09:02.485 --> 01:09:04.725 but or sorry. The, GPUs  
NOTE Confidence: 0.92536396

01:09:04.725 --> 01:09:06.564 in it, but they're right  
NOTE Confidence: 0.92536396

01:09:06.564 --> 01:09:08.185 there, literally. Yeah.  
NOTE Confidence: 0.8978747

01:09:11.284 --> 01:09:12.085 But with all the heat  
NOTE Confidence: 0.8978747

01:09:12.085 --> 01:09:13.225 coming off of it.

NOTE Confidence: 0.9957932  
01:09:17.280 --> 01:09:17.780 Alright.  
NOTE Confidence: 0.99319285  
01:09:19.040 --> 01:09:19.840 So I'm gonna show you  
NOTE Confidence: 0.99319285  
01:09:19.840 --> 01:09:20.720 a few things right now.  
NOTE Confidence: 0.99319285  
01:09:20.720 --> 01:09:21.600 I'm gonna show you how  
NOTE Confidence: 0.99319285  
01:09:21.600 --> 01:09:23.300 to reserve a GPU. So  
NOTE Confidence: 0.99319285  
01:09:23.600 --> 01:09:24.900 Nate mentioned that,  
NOTE Confidence: 0.9721755  
01:09:25.840 --> 01:09:27.620 we do have GPUs available,  
NOTE Confidence: 0.9721755  
01:09:27.680 --> 01:09:28.820 and you can request  
NOTE Confidence: 0.8989208  
01:09:29.564 --> 01:09:30.225 a GPU.  
NOTE Confidence: 0.99392617  
01:09:31.405 --> 01:09:32.285 And, I will show you  
NOTE Confidence: 0.99392617  
01:09:32.285 --> 01:09:33.425 how to do that reservation.  
NOTE Confidence: 0.83375275  
01:09:34.685 --> 01:09:36.385 Also show you the,  
NOTE Confidence: 0.98559666  
01:09:37.965 --> 01:09:40.064 how to request additional analytics  
NOTE Confidence: 0.98559666  
01:09:40.125 --> 01:09:41.645 packages and models if you  
NOTE Confidence: 0.98559666  
01:09:41.645 --> 01:09:42.145 have  
NOTE Confidence: 0.9989548

01:09:42.460 --> 01:09:44.300 interest in loading up additional  
NOTE Confidence: 0.9989548  
01:09:44.300 --> 01:09:44.800 models.  
NOTE Confidence: 0.98377967  
01:09:45.900 --> 01:09:46.860 I'll show you how to  
NOTE Confidence: 0.98377967  
01:09:46.860 --> 01:09:48.139 create an environment, and I'll  
NOTE Confidence: 0.98377967  
01:09:48.139 --> 01:09:49.500 show you an actual Jupyter  
NOTE Confidence: 0.98377967  
01:09:49.500 --> 01:09:50.000 notebook.  
NOTE Confidence: 0.9980399  
01:09:50.380 --> 01:09:51.420 I'm not gonna actually run  
NOTE Confidence: 0.9980399  
01:09:51.420 --> 01:09:52.719 through it, but I will  
NOTE Confidence: 0.9633814  
01:09:53.099 --> 01:09:54.619 I will I've already prerun  
NOTE Confidence: 0.9633814  
01:09:54.619 --> 01:09:55.579 it, and I will show  
NOTE Confidence: 0.9633814  
01:09:55.579 --> 01:09:56.320 you the results.  
NOTE Confidence: 0.9983125  
01:09:57.735 --> 01:09:58.715 So without further  
NOTE Confidence: 0.83039725  
01:10:02.375 --> 01:10:02.875 ado,  
NOTE Confidence: 0.9130644  
01:10:24.344 --> 01:10:25.625 And this is actually the  
NOTE Confidence: 0.9130644  
01:10:25.625 --> 01:10:26.125 OHDSI,  
NOTE Confidence: 0.84524614  
01:10:28.025 --> 01:10:28.525 Odyssey

NOTE Confidence: 0.99114877  
01:10:29.945 --> 01:10:31.545 website that Nate was discussing  
NOTE Confidence: 0.99114877  
01:10:31.545 --> 01:10:32.045 earlier.  
NOTE Confidence: 0.9824255  
01:10:35.864 --> 01:10:37.485 Alright. So this is Camino.  
NOTE Confidence: 0.59646446  
01:10:38.070 --> 01:10:38.570 Sure.  
NOTE Confidence: 0.85229254  
01:10:43.909 --> 01:10:46.090 Screen's not sharing. Gotcha. Yeah.  
NOTE Confidence: 0.66373026  
01:10:50.630 --> 01:10:51.130 Yep.  
NOTE Confidence: 0.61226606  
01:10:55.725 --> 01:10:56.785 System share.  
NOTE Confidence: 0.7330078  
01:11:00.685 --> 01:11:02.305 One sharing, one stop.  
NOTE Confidence: 0.77264524  
01:11:15.300 --> 01:11:15.800 Yeah.  
NOTE Confidence: 0.9362321  
01:11:30.195 --> 01:11:31.335 Alright. Thanks, Juan.  
NOTE Confidence: 0.9913432  
01:11:33.235 --> 01:11:34.775 Alright. Sorry about that, folks.  
NOTE Confidence: 0.9771264  
01:11:38.439 --> 01:11:39.560 Alright. So the first thing  
NOTE Confidence: 0.9771264  
01:11:39.560 --> 01:11:40.200 I'm gonna show you is  
NOTE Confidence: 0.9771264  
01:11:40.200 --> 01:11:41.740 how to request a GPU.  
NOTE Confidence: 0.9771264  
01:11:41.960 --> 01:11:42.460 So,  
NOTE Confidence: 0.98219204

01:11:43.640 --> 01:11:44.380 on everybody's  
NOTE Confidence: 0.9960648

01:11:45.640 --> 01:11:46.140 account,  
NOTE Confidence: 0.98442215

01:11:47.000 --> 01:11:48.300 there's a drop down  
NOTE Confidence: 0.96678346

01:11:49.445 --> 01:11:50.244 that shows,  
NOTE Confidence: 0.9814826

01:11:51.284 --> 01:11:53.144 GPU reservation in the list.  
NOTE Confidence: 0.98324347

01:11:54.644 --> 01:11:55.844 K. And when you go  
NOTE Confidence: 0.98324347

01:11:55.844 --> 01:11:57.224 to create a GPU reservation,  
NOTE Confidence: 0.98324347

01:11:57.364 --> 01:11:58.244 you just click on the  
NOTE Confidence: 0.98324347

01:11:58.244 --> 01:11:58.985 new GPU  
NOTE Confidence: 0.9920713

01:11:59.445 --> 01:11:59.945 reservation.  
NOTE Confidence: 0.98716515

01:12:01.969 --> 01:12:03.489 It'll prefill with your team  
NOTE Confidence: 0.98716515

01:12:03.489 --> 01:12:05.189 name and your username.  
NOTE Confidence: 0.98911166

01:12:06.290 --> 01:12:07.810 It'll also give you a  
NOTE Confidence: 0.98911166

01:12:07.810 --> 01:12:09.250 drop down that will list  
NOTE Confidence: 0.98911166

01:12:09.250 --> 01:12:10.070 all the available  
NOTE Confidence: 0.99965465

01:12:10.770 --> 01:12:12.469 GPU models that we have



NOTE Confidence: 0.964071  
01:12:13.090 --> 01:12:14.290 as well as the sizes.  
NOTE Confidence: 0.964071  
01:12:14.290 --> 01:12:16.025 So two GPU, four GPU,  
NOTE Confidence: 0.964071  
01:12:16.245 --> 01:12:17.064 eight GPU.  
NOTE Confidence: 0.90711737  
01:12:19.285 --> 01:12:20.725 Hey. I'm gonna just pick,  
NOTE Confidence: 0.94496197  
01:12:21.925 --> 01:12:23.205 everybody seems to like the  
NOTE Confidence: 0.94496197  
01:12:23.205 --> 01:12:24.324 h one hundred, so I'll  
NOTE Confidence: 0.94496197  
01:12:24.324 --> 01:12:25.364 do a two h one  
NOTE Confidence: 0.94496197  
01:12:25.364 --> 01:12:25.864 hundreds.  
NOTE Confidence: 0.9997944  
01:12:28.510 --> 01:12:29.409 You can choose  
NOTE Confidence: 0.99053174  
01:12:29.710 --> 01:12:30.989 how long you wanna reserve  
NOTE Confidence: 0.99053174  
01:12:30.989 --> 01:12:31.489 them.  
NOTE Confidence: 0.9476754  
01:12:32.110 --> 01:12:33.310 I'll give you an advanced  
NOTE Confidence: 0.9476754  
01:12:33.310 --> 01:12:33.810 warning.  
NOTE Confidence: 0.99914205  
01:12:34.189 --> 01:12:35.469 Typically, if you get a  
NOTE Confidence: 0.99914205  
01:12:35.469 --> 01:12:36.610 request in today,  
NOTE Confidence: 0.99720204

01:12:37.469 --> 01:12:38.290 I may  
NOTE Confidence: 0.8966407

01:12:38.670 --> 01:12:40.670 I may actually grant it  
NOTE Confidence: 0.8966407

01:12:40.670 --> 01:12:41.489 to you today.  
NOTE Confidence: 0.9876661

01:12:42.315 --> 01:12:43.275 The day I grant it  
NOTE Confidence: 0.9876661

01:12:43.275 --> 01:12:44.235 to you, I usually give  
NOTE Confidence: 0.9876661

01:12:44.235 --> 01:12:44.955 you the rest of the  
NOTE Confidence: 0.9876661

01:12:44.955 --> 01:12:46.255 day for free because  
NOTE Confidence: 0.99944997

01:12:47.035 --> 01:12:47.775 I don't  
NOTE Confidence: 0.9800968

01:12:48.235 --> 01:12:49.195 I don't always,  
NOTE Confidence: 0.98604023

01:12:50.555 --> 01:12:51.515 I don't always know if  
NOTE Confidence: 0.98604023

01:12:51.515 --> 01:12:52.155 you put it in at,  
NOTE Confidence: 0.98604023

01:12:52.155 --> 01:12:53.354 like, eight AM or if  
NOTE Confidence: 0.98604023

01:12:53.354 --> 01:12:54.075 you put it you know,  
NOTE Confidence: 0.98604023

01:12:54.075 --> 01:12:54.875 if I approve it at  
NOTE Confidence: 0.98604023

01:12:54.875 --> 01:12:56.610 noon or twelve thirty or  
NOTE Confidence: 0.98604023

01:12:56.610 --> 01:12:58.290 one o'clock. I don't wanna

NOTE Confidence: 0.98604023  
01:12:58.290 --> 01:12:59.570 shortchange you by half a  
NOTE Confidence: 0.98604023  
01:12:59.570 --> 01:13:00.770 day. So you get you  
NOTE Confidence: 0.98604023  
01:13:00.770 --> 01:13:01.729 get the full you get  
NOTE Confidence: 0.98604023  
01:13:01.729 --> 01:13:02.449 the rest of the day  
NOTE Confidence: 0.98604023  
01:13:02.449 --> 01:13:03.650 for free, then you get  
NOTE Confidence: 0.98604023  
01:13:03.650 --> 01:13:05.189 the next day completely.  
NOTE Confidence: 0.94907445  
01:13:06.449 --> 01:13:07.810 So, I'm gonna put it  
NOTE Confidence: 0.94907445  
01:13:07.810 --> 01:13:08.790 in for one day.  
NOTE Confidence: 0.92264956  
01:13:09.665 --> 01:13:10.165 Whoops.  
NOTE Confidence: 0.8036346  
01:13:10.705 --> 01:13:11.685 Give me that.  
NOTE Confidence: 0.9514964  
01:13:13.665 --> 01:13:14.785 COA is the chart of  
NOTE Confidence: 0.9514964  
01:13:14.785 --> 01:13:15.685 accounts field.  
NOTE Confidence: 0.97553885  
01:13:15.985 --> 01:13:17.445 So if you are,  
NOTE Confidence: 0.9640081  
01:13:18.545 --> 01:13:19.825 we're we're planning at some  
NOTE Confidence: 0.9640081  
01:13:19.825 --> 01:13:20.865 point to start billing for  
NOTE Confidence: 0.9640081

01:13:20.865 --> 01:13:22.725 these. So if you have,  
NOTE Confidence: 0.98172504

01:13:23.520 --> 01:13:24.960 for your grant, a chart  
NOTE Confidence: 0.98172504

01:13:24.960 --> 01:13:26.239 of accounts available, you can  
NOTE Confidence: 0.98172504

01:13:26.239 --> 01:13:27.439 put your COA number in  
NOTE Confidence: 0.98172504

01:13:27.439 --> 01:13:28.559 here, which will help you  
NOTE Confidence: 0.98172504

01:13:28.559 --> 01:13:29.059 to,  
NOTE Confidence: 0.9990192

01:13:29.840 --> 01:13:31.119 not have to get contacted  
NOTE Confidence: 0.9990192

01:13:31.119 --> 01:13:31.920 by me to find out  
NOTE Confidence: 0.9990192

01:13:31.920 --> 01:13:33.199 what your COA is before  
NOTE Confidence: 0.9990192

01:13:33.199 --> 01:13:34.179 I approve it.  
NOTE Confidence: 0.9959253

01:13:34.639 --> 01:13:35.380 And then,  
NOTE Confidence: 0.99968153

01:13:36.000 --> 01:13:37.199 if you put something in  
NOTE Confidence: 0.99968153

01:13:37.199 --> 01:13:37.699 for  
NOTE Confidence: 0.98020494

01:13:38.255 --> 01:13:39.215 what the purpose of the  
NOTE Confidence: 0.98020494

01:13:39.215 --> 01:13:40.974 GPU is to help kinda  
NOTE Confidence: 0.98020494

01:13:40.974 --> 01:13:42.655 understand what you're doing with

NOTE Confidence: 0.98020494  
01:13:42.655 --> 01:13:43.155 it.  
NOTE Confidence: 0.9587512  
01:13:55.699 --> 01:13:57.320 K. Obviously, I can't type.  
NOTE Confidence: 0.99623424  
01:13:58.500 --> 01:14:00.119 Alright. When you submit it,  
NOTE Confidence: 0.9948745  
01:14:01.539 --> 01:14:02.579 you'll see it will show  
NOTE Confidence: 0.9948745  
01:14:02.579 --> 01:14:03.239 as pending.  
NOTE Confidence: 0.99229765  
01:14:04.545 --> 01:14:06.385 Okay? And then when somebody  
NOTE Confidence: 0.99229765  
01:14:06.385 --> 01:14:07.825 goes and approves that, it  
NOTE Confidence: 0.99229765  
01:14:07.825 --> 01:14:08.965 will change to approved.  
NOTE Confidence: 0.99849683  
01:14:09.745 --> 01:14:10.865 Usually, if I can't approve  
NOTE Confidence: 0.99849683  
01:14:10.865 --> 01:14:11.905 it, I'll reach out to  
NOTE Confidence: 0.99849683  
01:14:11.905 --> 01:14:13.265 you and find out what  
NOTE Confidence: 0.99849683  
01:14:13.265 --> 01:14:14.325 you'd like to do.  
NOTE Confidence: 0.9991819  
01:14:15.425 --> 01:14:16.705 Typically, the only reason I  
NOTE Confidence: 0.9991819  
01:14:16.705 --> 01:14:18.545 don't approve them is because  
NOTE Confidence: 0.9991819  
01:14:18.545 --> 01:14:19.845 I don't have one available  
NOTE Confidence: 0.9856429

01:14:20.520 --> 01:14:21.960 because other people already are

NOTE Confidence: 0.9856429

01:14:21.960 --> 01:14:22.699 using them.

NOTE Confidence: 0.98467326

01:14:23.079 --> 01:14:24.360 So if I reach out

NOTE Confidence: 0.98467326

01:14:24.360 --> 01:14:25.479 to you, it's probably gonna

NOTE Confidence: 0.98467326

01:14:25.479 --> 01:14:27.239 be, can I do this

NOTE Confidence: 0.98467326

01:14:27.239 --> 01:14:28.439 for you in five days

NOTE Confidence: 0.98467326

01:14:28.439 --> 01:14:30.219 or four days, or

NOTE Confidence: 0.9983237

01:14:30.599 --> 01:14:31.400 is it okay if we

NOTE Confidence: 0.9983237

01:14:31.400 --> 01:14:32.539 do this next week?

NOTE Confidence: 0.92665136

01:14:33.455 --> 01:14:34.675 But for the most part,

NOTE Confidence: 0.9671449

01:14:34.975 --> 01:14:36.255 we've been pretty good about

NOTE Confidence: 0.9671449

01:14:36.255 --> 01:14:37.615 sharing the GPUs, so they've

NOTE Confidence: 0.9671449

01:14:37.615 --> 01:14:39.475 been going pretty pretty fast.

NOTE Confidence: 0.99136657

01:14:41.935 --> 01:14:43.455 Alright. I did mention that,

NOTE Confidence: 0.99136657

01:14:43.775 --> 01:14:44.735 I also wanted to show

NOTE Confidence: 0.99136657

01:14:44.735 --> 01:14:46.015 you how to ask for

NOTE Confidence: 0.99136657  
01:14:46.015 --> 01:14:47.535 additional models if you want  
NOTE Confidence: 0.99136657  
01:14:47.535 --> 01:14:48.595 a different model.  
NOTE Confidence: 0.9672087  
01:14:49.590 --> 01:14:51.050 Also, if you,  
NOTE Confidence: 0.9632362  
01:14:51.830 --> 01:14:53.510 have any analytics packages you  
NOTE Confidence: 0.9632362  
01:14:53.510 --> 01:14:54.250 wanna install,  
NOTE Confidence: 0.99914074  
01:14:54.870 --> 01:14:55.770 there is a  
NOTE Confidence: 0.9477449  
01:14:56.070 --> 01:14:57.430 report and enhancement on the  
NOTE Confidence: 0.9477449  
01:14:57.430 --> 01:14:58.650 left hand side here.  
NOTE Confidence: 0.99664617  
01:15:02.644 --> 01:15:03.525 This will take you  
NOTE Confidence: 0.9878214  
01:15:04.085 --> 01:15:05.545 hopefully, if I yep.  
NOTE Confidence: 0.96089464  
01:15:06.644 --> 01:15:07.525 You may have to log  
NOTE Confidence: 0.96089464  
01:15:07.525 --> 01:15:08.564 in to your y n  
NOTE Confidence: 0.96089464  
01:15:08.564 --> 01:15:09.385 h h credentials  
NOTE Confidence: 0.9945182  
01:15:10.164 --> 01:15:11.525 before you do this, but  
NOTE Confidence: 0.9945182  
01:15:11.525 --> 01:15:12.644 it will take you to  
NOTE Confidence: 0.9945182

01:15:12.644 --> 01:15:13.144 a  
NOTE Confidence: 0.9974179  
01:15:13.445 --> 01:15:13.945 form.  
NOTE Confidence: 0.96340936  
01:15:14.970 --> 01:15:16.170 It's a pretty simple form.  
NOTE Confidence: 0.96340936  
01:15:16.170 --> 01:15:17.290 It'll prefill with all your  
NOTE Confidence: 0.96340936  
01:15:17.290 --> 01:15:17.790 information.  
NOTE Confidence: 0.98220783  
01:15:18.570 --> 01:15:19.370 All you need to do  
NOTE Confidence: 0.98220783  
01:15:19.370 --> 01:15:20.510 is put in a title  
NOTE Confidence: 0.98220783  
01:15:20.810 --> 01:15:22.510 and a description. So,  
NOTE Confidence: 0.9381584  
01:15:22.970 --> 01:15:23.850 I mean, on the title,  
NOTE Confidence: 0.9381584  
01:15:23.850 --> 01:15:25.450 you just put requesting new  
NOTE Confidence: 0.9381584  
01:15:25.450 --> 01:15:27.930 large language model. And in  
NOTE Confidence: 0.9381584  
01:15:27.930 --> 01:15:29.070 the, description,  
NOTE Confidence: 0.99972546  
01:15:29.530 --> 01:15:30.270 tell me  
NOTE Confidence: 0.9848105  
01:15:30.995 --> 01:15:32.195 what you'd like, where it  
NOTE Confidence: 0.9848105  
01:15:32.195 --> 01:15:32.935 comes from,  
NOTE Confidence: 0.8624504  
01:15:33.314 --> 01:15:34.615 how it can get it.



NOTE Confidence: 0.98577034  
01:15:35.795 --> 01:15:36.535 We are  
NOTE Confidence: 0.98081964  
01:15:37.314 --> 01:15:39.415 heavily invested in Hugging Face,  
NOTE Confidence: 0.98081964  
01:15:39.555 --> 01:15:40.354 so we have a lot  
NOTE Confidence: 0.98081964  
01:15:40.354 --> 01:15:40.755 of,  
NOTE Confidence: 0.99617153  
01:15:41.155 --> 01:15:42.755 opportunity to grab Hugging Face  
NOTE Confidence: 0.99617153  
01:15:42.755 --> 01:15:44.915 models if you use Hugging  
NOTE Confidence: 0.99617153  
01:15:44.915 --> 01:15:45.415 Face.  
NOTE Confidence: 0.9599255  
01:15:47.659 --> 01:15:49.040 Those those are pretty much,  
NOTE Confidence: 0.98446244  
01:15:50.219 --> 01:15:52.380 approved for use, so we  
NOTE Confidence: 0.98446244  
01:15:52.380 --> 01:15:53.820 can we can pull them  
NOTE Confidence: 0.98446244  
01:15:53.820 --> 01:15:55.040 from hugging face.  
NOTE Confidence: 0.95074856  
01:15:56.380 --> 01:15:58.320 For the analytics models, basically,  
NOTE Confidence: 0.95074856  
01:15:58.380 --> 01:15:59.760 anything you can pip install,  
NOTE Confidence: 0.95074856  
01:15:59.820 --> 01:16:00.719 let me know.  
NOTE Confidence: 0.8232267  
01:16:01.065 --> 01:16:01.725 I tried  
NOTE Confidence: 0.95773506

01:16:02.585 --> 01:16:03.345 to I tried to do  
NOTE Confidence: 0.95773506

01:16:03.345 --> 01:16:04.745 a juggling act of, do  
NOTE Confidence: 0.95773506

01:16:04.745 --> 01:16:05.885 we wanna install  
NOTE Confidence: 0.9982688

01:16:06.825 --> 01:16:08.265 something that we already have  
NOTE Confidence: 0.9982688

01:16:08.265 --> 01:16:09.005 a similar  
NOTE Confidence: 0.8482736

01:16:09.785 --> 01:16:12.445 a similar analytics package for?  
NOTE Confidence: 0.9250986

01:16:13.639 --> 01:16:14.760 So if there's something out  
NOTE Confidence: 0.9250986

01:16:14.760 --> 01:16:15.260 there  
NOTE Confidence: 0.98389494

01:16:15.639 --> 01:16:17.719 that's special for you, it  
NOTE Confidence: 0.98389494

01:16:17.719 --> 01:16:19.099 helps for me to understand  
NOTE Confidence: 0.98389494

01:16:19.320 --> 01:16:21.479 why it's different than something  
NOTE Confidence: 0.98389494

01:16:21.479 --> 01:16:22.520 else that's out there. You  
NOTE Confidence: 0.98389494

01:16:22.520 --> 01:16:24.920 know? Why why seaborne when  
NOTE Confidence: 0.98389494

01:16:24.920 --> 01:16:25.979 we could use matplotlib?  
NOTE Confidence: 0.8918885

01:16:26.520 --> 01:16:27.955 You know, what we actually  
NOTE Confidence: 0.8918885

01:16:27.955 --> 01:16:29.175 have both of those. But,

NOTE Confidence: 0.9850383  
01:16:30.275 --> 01:16:31.155 you know, if you let  
NOTE Confidence: 0.9850383  
01:16:31.155 --> 01:16:32.195 me know what the difference  
NOTE Confidence: 0.9850383  
01:16:32.435 --> 01:16:33.955 what what you're interested in  
NOTE Confidence: 0.9850383  
01:16:33.955 --> 01:16:35.555 and why, that'll help me  
NOTE Confidence: 0.9850383  
01:16:35.555 --> 01:16:36.755 kinda make a decision to  
NOTE Confidence: 0.9850383  
01:16:36.755 --> 01:16:37.715 move forward with it or  
NOTE Confidence: 0.9850383  
01:16:37.715 --> 01:16:38.215 not.  
NOTE Confidence: 0.9492444  
01:16:46.410 --> 01:16:47.450 Alright. I'm gonna show you  
NOTE Confidence: 0.9492444  
01:16:47.450 --> 01:16:48.410 a little bit in about  
NOTE Confidence: 0.9492444  
01:16:48.410 --> 01:16:50.030 the environments. So we  
NOTE Confidence: 0.8482071  
01:16:51.130 --> 01:16:52.330 there we say, don't do  
NOTE Confidence: 0.8482071  
01:16:52.330 --> 01:16:53.470 live demos.  
NOTE Confidence: 0.8382608  
01:16:53.930 --> 01:16:55.310 Oh, question? Question.  
NOTE Confidence: 0.6823435  
01:16:55.689 --> 01:16:57.070 They talk about the rates.  
NOTE Confidence: 0.7284694  
01:16:57.455 --> 01:16:58.275 How much would it be  
NOTE Confidence: 0.75058556

01:16:58.655 --> 01:16:59.155 possible?  
NOTE Confidence: 0.97174525

01:17:01.295 --> 01:17:02.255 I'll I'll just say it's  
NOTE Confidence: 0.97174525

01:17:02.255 --> 01:17:04.095 very competitive with Hugging Face.  
NOTE Confidence: 0.97174525

01:17:04.095 --> 01:17:05.775 So Hugging Face charges about  
NOTE Confidence: 0.97174525

01:17:05.775 --> 01:17:07.455 a hundred and twenty dollars  
NOTE Confidence: 0.97174525

01:17:07.455 --> 01:17:08.035 a day.  
NOTE Confidence: 0.979142

01:17:08.735 --> 01:17:10.175 Ours are about a hundred  
NOTE Confidence: 0.979142

01:17:10.175 --> 01:17:11.695 and twenty dollars for seven  
NOTE Confidence: 0.979142

01:17:11.695 --> 01:17:12.515 days. So  
NOTE Confidence: 0.9986661

01:17:13.460 --> 01:17:14.840 it's it's pretty competitive.  
NOTE Confidence: 0.9662835

01:17:16.180 --> 01:17:17.540 I think the if I  
NOTE Confidence: 0.9662835

01:17:17.540 --> 01:17:18.900 recall correctly, the h one  
NOTE Confidence: 0.9662835

01:17:18.900 --> 01:17:20.280 hundreds are forty cents  
NOTE Confidence: 0.9202784

01:17:20.820 --> 01:17:22.120 per hour reservation,  
NOTE Confidence: 0.98871624

01:17:22.979 --> 01:17:24.500 and the a one hundreds  
NOTE Confidence: 0.98871624

01:17:24.500 --> 01:17:26.040 are thirty cents per hour,

NOTE Confidence: 0.98871624  
01:17:26.100 --> 01:17:27.640 and the v one hundreds  
NOTE Confidence: 0.98871624  
01:17:27.700 --> 01:17:28.680 have not been  
NOTE Confidence: 0.8813033  
01:17:29.755 --> 01:17:31.435 charged before yet. So  
NOTE Confidence: 0.44615334  
01:17:32.475 --> 01:17:34.015 So you've gone to amount  
NOTE Confidence: 0.5907152  
01:17:35.035 --> 01:17:36.155 of May where we are  
NOTE Confidence: 0.5907152  
01:17:36.155 --> 01:17:37.055 trial period.  
NOTE Confidence: 0.6753622  
01:17:52.820 --> 01:17:53.320 Yeah.  
NOTE Confidence: 0.9815603  
01:18:03.215 --> 01:18:04.975 Yeah. It's it's it's very  
NOTE Confidence: 0.9815603  
01:18:04.975 --> 01:18:06.815 it's very competitive compared to  
NOTE Confidence: 0.9815603  
01:18:06.815 --> 01:18:09.155 other providers like Hugging Face.  
NOTE Confidence: 0.9766939  
01:18:10.920 --> 01:18:11.720 I'm gonna show you how  
NOTE Confidence: 0.9766939  
01:18:11.720 --> 01:18:13.180 to create a new environment.  
NOTE Confidence: 0.92518497  
01:18:14.360 --> 01:18:15.479 Alright. So I'm just gonna  
NOTE Confidence: 0.92518497  
01:18:15.479 --> 01:18:17.500 create an environment here.  
NOTE Confidence: 0.99210584  
01:18:19.880 --> 01:18:21.240 I think Rich mentioned we're  
NOTE Confidence: 0.99210584

01:18:21.240 --> 01:18:21.900 kind of  
NOTE Confidence: 0.9620321

01:18:22.405 --> 01:18:23.225 helix number  
NOTE Confidence: 0.93469954

01:18:23.765 --> 01:18:24.905 oriented, so  
NOTE Confidence: 0.99920624

01:18:25.365 --> 01:18:26.485 a lot of my names  
NOTE Confidence: 0.99920624

01:18:26.485 --> 01:18:27.765 tend to have helix numbers  
NOTE Confidence: 0.99920624

01:18:27.765 --> 01:18:28.505 in them.  
NOTE Confidence: 0.9896469

01:18:30.245 --> 01:18:32.085 I'm gonna just make this  
NOTE Confidence: 0.9896469

01:18:32.085 --> 01:18:32.585 one  
NOTE Confidence: 0.9835492

01:18:34.405 --> 01:18:35.545 my favorite number.  
NOTE Confidence: 0.9457684

01:18:50.405 --> 01:18:51.705 Alright. When you  
NOTE Confidence: 0.9987488

01:18:55.685 --> 01:18:57.365 when you are selecting an  
NOTE Confidence: 0.9987488

01:18:57.365 --> 01:18:57.865 environment,  
NOTE Confidence: 0.9997112

01:18:58.405 --> 01:18:59.365 you need to make sure  
NOTE Confidence: 0.9997112

01:18:59.365 --> 01:19:01.945 that your image matches whatever  
NOTE Confidence: 0.9971401

01:19:02.485 --> 01:19:04.505 environment you're gonna build. So  
NOTE Confidence: 0.98794657

01:19:05.170 --> 01:19:06.369 in this case, I'm gonna

NOTE Confidence: 0.98794657  
01:19:06.369 --> 01:19:07.889 build an h one hundred  
NOTE Confidence: 0.98794657  
01:19:07.889 --> 01:19:09.809 environment. So I need to  
NOTE Confidence: 0.98794657  
01:19:09.809 --> 01:19:11.729 match the h one hundred  
NOTE Confidence: 0.98794657  
01:19:11.729 --> 01:19:13.729 environment with the GPU and  
NOTE Confidence: 0.98794657  
01:19:13.729 --> 01:19:14.229 PyTorch  
NOTE Confidence: 0.99315035  
01:19:14.849 --> 01:19:16.130 using a one hundred and  
NOTE Confidence: 0.99315035  
01:19:16.130 --> 01:19:16.949 h one hundred.  
NOTE Confidence: 0.9736087  
01:19:17.625 --> 01:19:19.224 So the last one here  
NOTE Confidence: 0.9736087  
01:19:19.224 --> 01:19:20.664 will do either a one  
NOTE Confidence: 0.9736087  
01:19:20.664 --> 01:19:21.945 hundred or h one hundred.  
NOTE Confidence: 0.9736087  
01:19:21.945 --> 01:19:23.144 The one above it, only  
NOTE Confidence: 0.9736087  
01:19:23.144 --> 01:19:24.045 v one hundreds,  
NOTE Confidence: 0.9863002  
01:19:24.585 --> 01:19:25.704 and the other one is  
NOTE Confidence: 0.9863002  
01:19:25.704 --> 01:19:27.885 for just Python and PySpark.  
NOTE Confidence: 0.9559627  
01:19:33.620 --> 01:19:34.820 Alright. So like I said,  
NOTE Confidence: 0.9559627

01:19:34.820 --> 01:19:35.960 when you match them,  
NOTE Confidence: 0.9880995

01:19:36.420 --> 01:19:37.700 the size of the environment,  
NOTE Confidence: 0.9880995

01:19:37.700 --> 01:19:38.979 the GPUs you're gonna use,  
NOTE Confidence: 0.9880995

01:19:38.979 --> 01:19:40.340 the CPUs you're gonna use  
NOTE Confidence: 0.9880995

01:19:40.340 --> 01:19:41.939 needs to match with the  
NOTE Confidence: 0.9880995

01:19:41.939 --> 01:19:43.560 image that you're using. So  
NOTE Confidence: 0.97172177

01:19:44.020 --> 01:19:44.820 this will have to be  
NOTE Confidence: 0.97172177

01:19:44.820 --> 01:19:45.960 an h one hundred.  
NOTE Confidence: 0.7130799

01:19:47.885 --> 01:19:48.751 I'll keep you the eight.  
NOTE Confidence: 0.7130799

01:19:48.751 --> 01:19:49.425 Let's see.  
NOTE Confidence: 0.98324394

01:19:58.205 --> 01:19:59.405 K. So two h one  
NOTE Confidence: 0.98324394

01:19:59.405 --> 01:19:59.905 hundreds  
NOTE Confidence: 0.9989333

01:20:02.120 --> 01:20:03.100 should do it.  
NOTE Confidence: 0.97747296

01:20:04.920 --> 01:20:06.200 K. And when you create  
NOTE Confidence: 0.97747296

01:20:06.200 --> 01:20:07.479 an environment, you'll have an  
NOTE Confidence: 0.97747296

01:20:07.479 --> 01:20:09.560 opportunity to put a data



NOTE Confidence: 0.97747296  
01:20:09.560 --> 01:20:11.020 request in. So,  
NOTE Confidence: 0.9520088  
01:20:11.880 --> 01:20:12.760 I'm gonna put in a  
NOTE Confidence: 0.9520088  
01:20:12.760 --> 01:20:13.880 couple of different data alert  
NOTE Confidence: 0.9520088  
01:20:13.960 --> 01:20:14.780 data requests.  
NOTE Confidence: 0.99481416  
01:20:19.074 --> 01:20:20.354 The first data request I  
NOTE Confidence: 0.99481416  
01:20:20.354 --> 01:20:21.554 put in is gonna be  
NOTE Confidence: 0.99481416  
01:20:21.554 --> 01:20:23.495 this large language model access.  
NOTE Confidence: 0.99940807  
01:20:24.275 --> 01:20:25.175 When you request  
NOTE Confidence: 0.9990301  
01:20:25.795 --> 01:20:27.314 a large when you request  
NOTE Confidence: 0.9990301  
01:20:27.314 --> 01:20:28.755 using a GPU, I will  
NOTE Confidence: 0.9990301  
01:20:28.755 --> 01:20:30.935 automatically give you an LLM  
NOTE Confidence: 0.9990301  
01:20:31.074 --> 01:20:32.750 access to go with it.  
NOTE Confidence: 0.92616034  
01:20:33.210 --> 01:20:34.890 That way you can access  
NOTE Confidence: 0.92616034  
01:20:34.890 --> 01:20:35.630 the predownloaded  
NOTE Confidence: 0.99630904  
01:20:35.930 --> 01:20:37.229 large language models.  
NOTE Confidence: 0.99068034

01:20:38.010 --> 01:20:39.370 Additionally, I'm gonna throw in  
NOTE Confidence: 0.99068034

01:20:39.370 --> 01:20:40.430 some data here.  
NOTE Confidence: 0.90660876

01:20:45.155 --> 01:20:46.115 So I have a limited  
NOTE Confidence: 0.90660876

01:20:46.115 --> 01:20:46.615 dataset,  
NOTE Confidence: 0.9942338

01:20:49.235 --> 01:20:50.595 folder, which I'll throw in  
NOTE Confidence: 0.9942338

01:20:50.595 --> 01:20:51.495 there as well.  
NOTE Confidence: 0.9466917

01:20:57.800 --> 01:20:59.100 Now for the tricky part.  
NOTE Confidence: 0.9698925

01:20:59.479 --> 01:21:00.860 If I start this up,  
NOTE Confidence: 0.9804492

01:21:03.479 --> 01:21:04.600 I'm actually starting up a  
NOTE Confidence: 0.9804492

01:21:04.600 --> 01:21:06.860 two GPU environment now. So,  
NOTE Confidence: 0.98291147

01:21:08.439 --> 01:21:09.640 in theory, it will start  
NOTE Confidence: 0.98291147

01:21:09.640 --> 01:21:11.054 up. In practice,  
NOTE Confidence: 0.97034883

01:21:11.514 --> 01:21:12.395 right now, I think we  
NOTE Confidence: 0.97034883

01:21:12.395 --> 01:21:13.114 have a lot of people  
NOTE Confidence: 0.97034883

01:21:13.114 --> 01:21:14.314 using h one hundreds, so  
NOTE Confidence: 0.97034883

01:21:14.314 --> 01:21:15.434 I may not actually get

NOTE Confidence: 0.97034883  
01:21:15.434 --> 01:21:16.715 the h one hundred started.  
NOTE Confidence: 0.97034883  
01:21:16.715 --> 01:21:17.914 It may throw an error  
NOTE Confidence: 0.97034883  
01:21:17.914 --> 01:21:18.574 for me,  
NOTE Confidence: 0.9914123  
01:21:18.875 --> 01:21:20.155 but I did wanna just  
NOTE Confidence: 0.9914123  
01:21:20.155 --> 01:21:21.295 at least show it.  
NOTE Confidence: 0.9775771  
01:21:23.809 --> 01:21:25.329 H one hundreds do take  
NOTE Confidence: 0.9775771  
01:21:25.329 --> 01:21:26.210 up a little bit of  
NOTE Confidence: 0.9775771  
01:21:26.210 --> 01:21:27.349 time to spin up.  
NOTE Confidence: 0.9619284  
01:21:27.650 --> 01:21:29.650 The virtual CPUs, the regular  
NOTE Confidence: 0.9619284  
01:21:29.650 --> 01:21:30.150 CPUs,  
NOTE Confidence: 0.9918826  
01:21:30.769 --> 01:21:32.050 spin up pretty quickly. They're  
NOTE Confidence: 0.9918826  
01:21:32.210 --> 01:21:33.329 they take about a minute,  
NOTE Confidence: 0.9918826  
01:21:33.329 --> 01:21:33.989 two minutes.  
NOTE Confidence: 0.97985405  
01:21:35.729 --> 01:21:36.229 The  
NOTE Confidence: 0.9725959  
01:21:36.975 --> 01:21:39.287 LLM I'm sorry. The, the  
NOTE Confidence: 0.9725959

01:21:39.287 --> 01:21:40.939 h one hundreds, the GPUs,  
NOTE Confidence: 0.9725959

01:21:40.939 --> 01:21:42.590 the a one hundreds take  
NOTE Confidence: 0.9725959

01:21:42.590 --> 01:21:44.242 a little bit more time  
NOTE Confidence: 0.9725959

01:21:44.242 --> 01:21:45.893 to spin up. They sometimes  
NOTE Confidence: 0.9725959

01:21:45.893 --> 01:21:47.545 go, like, four or five  
NOTE Confidence: 0.9725959

01:21:47.545 --> 01:21:49.197 minutes. But while we're waiting  
NOTE Confidence: 0.9725959

01:21:49.197 --> 01:21:50.848 for that spin up, we'll  
NOTE Confidence: 0.9725959

01:21:50.848 --> 01:21:52.500 do something else as well.  
NOTE Confidence: 0.9725959

01:21:52.660 --> 01:21:53.160 So  
NOTE Confidence: 0.99351877

01:21:55.380 --> 01:21:56.439 while that's going,  
NOTE Confidence: 0.9983045

01:22:01.140 --> 01:22:02.340 we'll go to an environment  
NOTE Confidence: 0.9983045

01:22:02.340 --> 01:22:03.400 I already have running.  
NOTE Confidence: 0.9188212

01:22:05.895 --> 01:22:06.875 K. So  
NOTE Confidence: 0.9927204

01:22:09.095 --> 01:22:10.455 this environment is a two  
NOTE Confidence: 0.9927204

01:22:10.455 --> 01:22:10.955 CPU,  
NOTE Confidence: 0.9463939

01:22:12.455 --> 01:22:14.555 eight gigabyte of RAM environment.

NOTE Confidence: 0.9463939  
01:22:14.695 --> 01:22:15.975 So no GPUs on this  
NOTE Confidence: 0.9463939  
01:22:15.975 --> 01:22:17.175 one. This is just plain  
NOTE Confidence: 0.9463939  
01:22:17.175 --> 01:22:17.675 pie  
NOTE Confidence: 0.83665586  
01:22:18.310 --> 01:22:18.890 pie spark.  
NOTE Confidence: 0.9959125  
01:22:24.070 --> 01:22:24.570 And  
NOTE Confidence: 0.9977684  
01:22:25.830 --> 01:22:27.030 clicking on this link will  
NOTE Confidence: 0.9977684  
01:22:27.030 --> 01:22:28.010 bring up the JupyterLab.  
NOTE Confidence: 0.9976513  
01:22:31.785 --> 01:22:32.925 So in this JupyterLab,  
NOTE Confidence: 0.9985618  
01:22:34.185 --> 01:22:35.165 this is actually  
NOTE Confidence: 0.99721724  
01:22:35.945 --> 01:22:36.825 one that I set up  
NOTE Confidence: 0.99721724  
01:22:36.825 --> 01:22:38.345 a while back. I did  
NOTE Confidence: 0.99721724  
01:22:38.345 --> 01:22:38.845 some  
NOTE Confidence: 0.97253394  
01:22:39.865 --> 01:22:41.465 some SQL testing in here  
NOTE Confidence: 0.97253394  
01:22:41.465 --> 01:22:42.665 just for fun, just to  
NOTE Confidence: 0.97253394  
01:22:42.665 --> 01:22:44.845 get used to the environment.  
NOTE Confidence: 0.9318911

01:22:47.530 --> 01:22:48.650 So you can see here  
NOTE Confidence: 0.9318911

01:22:48.650 --> 01:22:49.310 I have  
NOTE Confidence: 0.99502456

01:22:49.689 --> 01:22:51.050 data. So this is the  
NOTE Confidence: 0.99502456

01:22:51.050 --> 01:22:52.250 data that Rich was talking  
NOTE Confidence: 0.99502456

01:22:52.250 --> 01:22:54.430 about. These are literally the,  
NOTE Confidence: 0.931896

01:22:55.770 --> 01:22:56.830 parquet files.  
NOTE Confidence: 0.9996255

01:22:57.210 --> 01:22:58.189 So in here  
NOTE Confidence: 0.9755066

01:23:00.425 --> 01:23:02.445 are parquet files for each,  
NOTE Confidence: 0.99945015

01:23:03.705 --> 01:23:04.925 for each and every  
NOTE Confidence: 0.99350566

01:23:07.305 --> 01:23:09.725 grouping of data. So  
NOTE Confidence: 0.93288225

01:23:10.345 --> 01:23:11.545 this is like the concept  
NOTE Confidence: 0.93288225

01:23:11.545 --> 01:23:12.045 tables.  
NOTE Confidence: 0.98078376

01:23:15.489 --> 01:23:17.170 Almost everybody deals with person  
NOTE Confidence: 0.98078376

01:23:17.170 --> 01:23:19.030 tables. So these parquet files  
NOTE Confidence: 0.98078376

01:23:19.250 --> 01:23:20.130 are not a one to  
NOTE Confidence: 0.98078376

01:23:20.130 --> 01:23:21.489 one relationship. You won't have

NOTE Confidence: 0.98078376  
01:23:21.489 --> 01:23:22.850 three million if you're looking  
NOTE Confidence: 0.98078376  
01:23:22.850 --> 01:23:23.590 for everybody.  
NOTE Confidence: 0.9913172  
01:23:24.130 --> 01:23:26.290 Each parquet file can contain  
NOTE Confidence: 0.9913172  
01:23:26.290 --> 01:23:28.070 thousands of records. So  
NOTE Confidence: 0.9552376  
01:23:29.085 --> 01:23:30.285 the the fun part is  
NOTE Confidence: 0.9552376  
01:23:30.285 --> 01:23:31.425 reading them all together,  
NOTE Confidence: 0.98193043  
01:23:32.604 --> 01:23:33.885 which I've already done for  
NOTE Confidence: 0.98193043  
01:23:33.885 --> 01:23:35.745 us because I didn't wanna  
NOTE Confidence: 0.99907804  
01:23:36.445 --> 01:23:37.405 spend too much time on  
NOTE Confidence: 0.99907804  
01:23:37.405 --> 01:23:37.905 this.  
NOTE Confidence: 0.98342544  
01:23:40.364 --> 01:23:41.165 So you can see here,  
NOTE Confidence: 0.98342544  
01:23:41.165 --> 01:23:42.364 this is the code that  
NOTE Confidence: 0.98342544  
01:23:42.364 --> 01:23:43.505 reads in the data.  
NOTE Confidence: 0.7110136  
01:23:45.800 --> 01:23:46.300 Alright?  
NOTE Confidence: 0.91808087  
01:23:47.800 --> 01:23:48.600 Every now and then, you  
NOTE Confidence: 0.91808087

01:23:48.600 --> 01:23:50.060 have little warnings from,  
NOTE Confidence: 0.9994289

01:23:51.160 --> 01:23:51.660 from  
NOTE Confidence: 0.9874203

01:23:52.120 --> 01:23:52.620 Jupyter  
NOTE Confidence: 0.99552745

01:23:53.080 --> 01:23:54.680 because of things that come  
NOTE Confidence: 0.99552745

01:23:54.680 --> 01:23:55.180 up.  
NOTE Confidence: 0.9010702

01:23:55.880 --> 01:23:57.320 Some of them usually, the  
NOTE Confidence: 0.9010702

01:23:57.320 --> 01:23:58.939 warnings you can ignore, but  
NOTE Confidence: 0.9010702

01:23:59.155 --> 01:24:01.895 errors you have to fix.  
NOTE Confidence: 0.9010702

01:24:02.035 --> 01:24:04.115 Right? So this is where  
NOTE Confidence: 0.9010702

01:24:04.115 --> 01:24:05.155 I lead read in the  
NOTE Confidence: 0.9010702

01:24:05.155 --> 01:24:06.135 OMOP files.  
NOTE Confidence: 0.97565746

01:24:06.515 --> 01:24:07.555 You can see here, I  
NOTE Confidence: 0.97565746

01:24:07.555 --> 01:24:08.915 actually read in the OMOP  
NOTE Confidence: 0.97565746

01:24:08.915 --> 01:24:10.615 files. I got output.  
NOTE Confidence: 0.9614759

01:24:12.990 --> 01:24:13.790 And this is only the  
NOTE Confidence: 0.9614759

01:24:13.790 --> 01:24:15.070 first twenty five lines. There's



NOTE Confidence: 0.9614759  
01:24:15.070 --> 01:24:16.130 about two thousand,  
NOTE Confidence: 0.98692316  
01:24:16.830 --> 01:24:18.110 if I recall correctly, in  
NOTE Confidence: 0.98692316  
01:24:18.110 --> 01:24:19.170 this file.  
NOTE Confidence: 0.9463726  
01:24:21.229 --> 01:24:22.590 So, basically, I read in  
NOTE Confidence: 0.9463726  
01:24:22.590 --> 01:24:24.770 information about a small cohort,  
NOTE Confidence: 0.9755922  
01:24:27.795 --> 01:24:29.015 and I actually  
NOTE Confidence: 0.9501343  
01:24:29.475 --> 01:24:30.594 did a little bit. I  
NOTE Confidence: 0.9501343  
01:24:30.594 --> 01:24:31.875 just split it up to  
NOTE Confidence: 0.9501343  
01:24:31.875 --> 01:24:33.635 see, like, okay. Analytic you  
NOTE Confidence: 0.9501343  
01:24:33.635 --> 01:24:34.755 know, just to do some  
NOTE Confidence: 0.9501343  
01:24:34.755 --> 01:24:35.575 light analytics,  
NOTE Confidence: 0.99653184  
01:24:36.275 --> 01:24:36.775 what  
NOTE Confidence: 0.97822464  
01:24:37.395 --> 01:24:39.235 what group were males versus  
NOTE Confidence: 0.97822464  
01:24:39.235 --> 01:24:40.375 females. So  
NOTE Confidence: 0.9634327  
01:24:41.229 --> 01:24:42.349 it's a graph of male  
NOTE Confidence: 0.9634327

01:24:42.349 --> 01:24:43.329 versus female.  
NOTE Confidence: 0.99930626

01:24:44.829 --> 01:24:46.429 I also spit out the  
NOTE Confidence: 0.99930626

01:24:46.429 --> 01:24:47.729 data into my  
NOTE Confidence: 0.97241616

01:24:50.110 --> 01:24:50.929 team directory.  
NOTE Confidence: 0.9736114

01:24:57.005 --> 01:24:58.525 So the actual data is  
NOTE Confidence: 0.9736114

01:24:58.525 --> 01:24:59.025 here.  
NOTE Confidence: 0.7541616

01:25:01.885 --> 01:25:03.185 Actually, we have it open.  
NOTE Confidence: 0.92276174

01:25:04.125 --> 01:25:05.344 So these were the results.  
NOTE Confidence: 0.90915084

01:25:06.364 --> 01:25:07.185 So people  
NOTE Confidence: 0.99680984

01:25:07.645 --> 01:25:08.465 who have  
NOTE Confidence: 0.99903834

01:25:09.850 --> 01:25:10.910 chronic myeloid  
NOTE Confidence: 0.94392353

01:25:11.690 --> 01:25:12.190 leukemia.  
NOTE Confidence: 0.9760656

01:25:13.290 --> 01:25:13.790 Right?  
NOTE Confidence: 0.97997683

01:25:14.570 --> 01:25:15.450 And I have it split  
NOTE Confidence: 0.97997683

01:25:15.450 --> 01:25:16.810 up based on what their,  
NOTE Confidence: 0.9805875

01:25:17.850 --> 01:25:19.690 what their condition source code

NOTE Confidence: 0.9805875  
01:25:19.690 --> 01:25:21.690 was. So these source codes  
NOTE Confidence: 0.9805875  
01:25:21.690 --> 01:25:23.070 are ICD nine codes.  
NOTE Confidence: 0.89728904  
01:25:28.854 --> 01:25:29.895 This is the SQL that  
NOTE Confidence: 0.89728904  
01:25:29.895 --> 01:25:30.395 ran.  
NOTE Confidence: 0.9505713  
01:25:30.775 --> 01:25:31.735 So the c you can  
NOTE Confidence: 0.9505713  
01:25:31.735 --> 01:25:32.795 see from the SQL,  
NOTE Confidence: 0.950003  
01:25:33.974 --> 01:25:35.514 basically, you're looking at,  
NOTE Confidence: 0.98526  
01:25:37.460 --> 01:25:39.380 persons who have a specific  
NOTE Confidence: 0.98526  
01:25:39.380 --> 01:25:40.280 set of source  
NOTE Confidence: 0.96670294  
01:25:40.580 --> 01:25:42.739 condition codes, and their birth  
NOTE Confidence: 0.96670294  
01:25:42.739 --> 01:25:44.680 date is before March first  
NOTE Confidence: 0.9296897  
01:25:45.300 --> 01:25:46.360 two thousand five.  
NOTE Confidence: 0.9189253  
01:25:46.979 --> 01:25:48.580 And specifically in the date  
NOTE Confidence: 0.9189253  
01:25:48.580 --> 01:25:49.080 range  
NOTE Confidence: 0.99523866  
01:25:49.625 --> 01:25:51.085 where they were seen between,  
NOTE Confidence: 0.9956309

01:25:52.425 --> 01:25:54.604 December first twenty twenty two

NOTE Confidence: 0.9956309

01:25:54.665 --> 01:25:55.165 and

NOTE Confidence: 0.9981958

01:25:56.265 --> 01:25:57.945 January first twenty twenty three.

NOTE Confidence: 0.9981958

01:25:57.945 --> 01:25:58.685 So that's,

NOTE Confidence: 0.77145904

01:25:59.225 --> 01:26:00.364 when I say two thousand,

NOTE Confidence: 0.99691707

01:26:00.905 --> 01:26:02.045 two thousand people

NOTE Confidence: 0.99982154

01:26:02.820 --> 01:26:03.560 just in

NOTE Confidence: 0.9942932

01:26:04.180 --> 01:26:05.560 that one month time frame.

NOTE Confidence: 0.99787235

01:26:06.020 --> 01:26:06.520 So

NOTE Confidence: 0.9977384

01:26:07.700 --> 01:26:09.000 let's see if that other

NOTE Confidence: 0.9977384

01:26:09.060 --> 01:26:10.120 environment started.

NOTE Confidence: 0.95342624

01:26:18.885 --> 01:26:20.425 Yeah. It's still pending. So,

NOTE Confidence: 0.9964893

01:26:21.765 --> 01:26:22.645 I'm not gonna wait for

NOTE Confidence: 0.9964893

01:26:22.645 --> 01:26:23.445 it to start, but I

NOTE Confidence: 0.9964893

01:26:23.445 --> 01:26:25.225 did wanna just mention that

NOTE Confidence: 0.9964893

01:26:25.525 --> 01:26:26.885 when it when it does

NOTE Confidence: 0.9964893  
01:26:26.885 --> 01:26:27.385 start,  
NOTE Confidence: 0.999193  
01:26:28.085 --> 01:26:29.604 it's a good day. When  
NOTE Confidence: 0.999193  
01:26:29.604 --> 01:26:30.885 it doesn't start, you'll get  
NOTE Confidence: 0.999193  
01:26:30.885 --> 01:26:32.650 an error message that shows  
NOTE Confidence: 0.999193  
01:26:32.650 --> 01:26:34.090 you why it didn't start.  
NOTE Confidence: 0.999193  
01:26:34.090 --> 01:26:34.590 So  
NOTE Confidence: 0.9873684  
01:26:36.490 --> 01:26:37.930 with that, are there any  
NOTE Confidence: 0.9873684  
01:26:37.930 --> 01:26:38.430 questions?  
NOTE Confidence: 0.84342074  
01:26:42.410 --> 01:26:43.610 Is there a way that  
NOTE Confidence: 0.84342074  
01:26:43.610 --> 01:26:45.150 you can delete your  
NOTE Confidence: 0.61063546  
01:26:45.735 --> 01:26:47.275 environment that, like, you know,  
NOTE Confidence: 0.98839736  
01:26:49.335 --> 01:26:50.075 Yeah. So,  
NOTE Confidence: 0.999295  
01:26:50.775 --> 01:26:51.995 we're working on  
NOTE Confidence: 0.8768245  
01:26:52.535 --> 01:26:54.075 the the delete functionality,  
NOTE Confidence: 0.97523206  
01:26:54.535 --> 01:26:55.895 so we can just get  
NOTE Confidence: 0.97523206

01:26:55.895 --> 01:26:57.415 rid of them. But, basically,  
NOTE Confidence: 0.97523206

01:26:57.415 --> 01:26:58.455 if you don't start the  
NOTE Confidence: 0.97523206

01:26:58.455 --> 01:26:59.929 environment, if you shut down  
NOTE Confidence: 0.97523206

01:26:59.929 --> 01:27:01.290 the environment, it's not taking  
NOTE Confidence: 0.97523206

01:27:01.290 --> 01:27:03.229 up any resources, so it's  
NOTE Confidence: 0.9316172

01:27:03.850 --> 01:27:05.130 not a not a major  
NOTE Confidence: 0.9316172

01:27:05.130 --> 01:27:05.630 concern.  
NOTE Confidence: 0.9633411

01:27:06.409 --> 01:27:07.370 I do ask people to  
NOTE Confidence: 0.9633411

01:27:07.370 --> 01:27:08.729 shut down environments when they're  
NOTE Confidence: 0.9633411

01:27:08.729 --> 01:27:10.650 done because, like everything else  
NOTE Confidence: 0.9633411

01:27:10.650 --> 01:27:12.189 on this planet, it's finite.  
NOTE Confidence: 0.9633411

01:27:12.250 --> 01:27:12.750 And,  
NOTE Confidence: 0.9651182

01:27:13.375 --> 01:27:14.735 you know, if we shut  
NOTE Confidence: 0.9651182

01:27:14.735 --> 01:27:15.854 down environments where we're not  
NOTE Confidence: 0.9651182

01:27:15.854 --> 01:27:17.054 using them, you'll have plenty  
NOTE Confidence: 0.9651182

01:27:17.054 --> 01:27:17.554 of

NOTE Confidence: 0.9254915  
01:27:18.335 --> 01:27:19.935 resources for other people to  
NOTE Confidence: 0.9254915  
01:27:19.935 --> 01:27:20.655 share. So  
NOTE Confidence: 0.60850686  
01:27:21.534 --> 01:27:22.494 Yeah. Good question. I was  
NOTE Confidence: 0.60850686  
01:27:22.494 --> 01:27:23.935 just wondering, when within the  
NOTE Confidence: 0.60850686  
01:27:23.935 --> 01:27:25.804 stats, when do you create  
NOTE Confidence: 0.6633766  
01:27:26.460 --> 01:27:27.840 That before the environment  
NOTE Confidence: 0.9349817  
01:27:28.940 --> 01:27:30.560 Yeah. So good question. So  
NOTE Confidence: 0.9849785  
01:27:31.900 --> 01:27:33.200 so you can see here,  
NOTE Confidence: 0.9678286  
01:27:33.660 --> 01:27:35.100 right now, I'm a member  
NOTE Confidence: 0.9678286  
01:27:35.100 --> 01:27:36.080 of chip admin.  
NOTE Confidence: 0.9829251  
01:27:36.860 --> 01:27:37.900 If you don't have more  
NOTE Confidence: 0.9829251  
01:27:37.979 --> 01:27:39.180 if you have when you  
NOTE Confidence: 0.9829251  
01:27:39.180 --> 01:27:40.240 request the team  
NOTE Confidence: 0.9739372  
01:27:41.265 --> 01:27:43.265 through the process of that,  
NOTE Confidence: 0.86739886  
01:27:45.185 --> 01:27:46.625 that Rich showed earlier where  
NOTE Confidence: 0.86739886

01:27:46.625 --> 01:27:47.505 you put in a a  
NOTE Confidence: 0.86739886

01:27:47.505 --> 01:27:49.104 helix request. So you first,  
NOTE Confidence: 0.86739886

01:27:49.104 --> 01:27:50.405 you request RBA.  
NOTE Confidence: 0.92488956

01:27:51.745 --> 01:27:53.025 K. Once you have researcher  
NOTE Confidence: 0.92488956

01:27:53.025 --> 01:27:55.185 basic access, you'll have a  
NOTE Confidence: 0.92488956

01:27:55.185 --> 01:27:56.405 YNHH ID,  
NOTE Confidence: 0.9285691

01:27:56.870 --> 01:27:57.990 then you can request a  
NOTE Confidence: 0.9285691

01:27:57.990 --> 01:27:59.590 team. When you request the  
NOTE Confidence: 0.9285691

01:27:59.590 --> 01:28:00.090 team  
NOTE Confidence: 0.95237255

01:28:00.870 --> 01:28:02.470 through the Helix request, you'll  
NOTE Confidence: 0.95237255

01:28:02.470 --> 01:28:03.610 get a team,  
NOTE Confidence: 0.99435145

01:28:06.150 --> 01:28:06.650 okay,  
NOTE Confidence: 0.99914175

01:28:07.110 --> 01:28:08.710 which will contain your IRB  
NOTE Confidence: 0.99914175

01:28:08.710 --> 01:28:09.210 number  
NOTE Confidence: 0.9622795

01:28:09.510 --> 01:28:10.630 or p two r, if  
NOTE Confidence: 0.9622795

01:28:10.630 --> 01:28:11.430 you're a p two r



NOTE Confidence: 0.9622795  
01:28:11.430 --> 01:28:11.930 team,  
NOTE Confidence: 0.9646237  
01:28:13.245 --> 01:28:15.245 the helix number, and the  
NOTE Confidence: 0.9646237  
01:28:15.245 --> 01:28:16.625 PI's last name.  
NOTE Confidence: 0.9627237  
01:28:19.245 --> 01:28:20.285 When when you get the  
NOTE Confidence: 0.9627237  
01:28:20.285 --> 01:28:20.785 team,  
NOTE Confidence: 0.9906727  
01:28:21.645 --> 01:28:22.685 if you only have one  
NOTE Confidence: 0.9906727  
01:28:22.685 --> 01:28:23.805 team, you won't see this  
NOTE Confidence: 0.9906727  
01:28:23.805 --> 01:28:25.025 team drop down  
NOTE Confidence: 0.85226876  
01:28:25.645 --> 01:28:26.145 because  
NOTE Confidence: 0.958886  
01:28:27.280 --> 01:28:28.240 you only show it once  
NOTE Confidence: 0.958886  
01:28:28.240 --> 01:28:29.380 you have multiple teams.  
NOTE Confidence: 0.98898107  
01:28:31.680 --> 01:28:32.820 You'll then be able  
NOTE Confidence: 0.9960717  
01:28:33.200 --> 01:28:34.260 to have a project.  
NOTE Confidence: 0.99808395  
01:28:34.720 --> 01:28:36.020 Typically, the  
NOTE Confidence: 0.9055159  
01:28:37.200 --> 01:28:39.220 data the the JADAT RIO  
NOTE Confidence: 0.9055159

01:28:39.280 --> 01:28:40.420 team will put  
NOTE Confidence: 0.98429155  
01:28:40.864 --> 01:28:41.525 a actual,  
NOTE Confidence: 0.98552006  
01:28:41.985 --> 01:28:43.445 project out here for you.  
NOTE Confidence: 0.9994188  
01:28:44.304 --> 01:28:46.064 And under the project is  
NOTE Confidence: 0.9994188  
01:28:46.064 --> 01:28:46.564 where  
NOTE Confidence: 0.996717  
01:28:47.104 --> 01:28:49.205 that data information gets loaded.  
NOTE Confidence: 0.996717  
01:28:49.265 --> 01:28:49.765 So,  
NOTE Confidence: 0.99713236  
01:28:51.104 --> 01:28:51.925 we do have  
NOTE Confidence: 0.99721086  
01:28:52.950 --> 01:28:54.729 we do have self-service capability,  
NOTE Confidence: 0.99721086  
01:28:54.950 --> 01:28:56.150 but it does need to  
NOTE Confidence: 0.99721086  
01:28:56.150 --> 01:28:57.610 be approved. So  
NOTE Confidence: 0.9460542  
01:28:58.070 --> 01:28:59.510 but right now, asking people  
NOTE Confidence: 0.9460542  
01:28:59.510 --> 01:29:00.729 to work with the JADAP  
NOTE Confidence: 0.9460542  
01:29:00.870 --> 01:29:01.370 team  
NOTE Confidence: 0.9955222  
01:29:01.990 --> 01:29:02.870 to make sure that they  
NOTE Confidence: 0.9955222  
01:29:02.870 --> 01:29:03.770 have their data,

NOTE Confidence: 0.99690866  
01:29:04.470 --> 01:29:05.530 their their cohort  
NOTE Confidence: 0.99229294  
01:29:06.070 --> 01:29:07.670 well identified before they go  
NOTE Confidence: 0.99229294  
01:29:07.670 --> 01:29:08.410 through this.  
NOTE Confidence: 0.995574  
01:29:10.844 --> 01:29:12.445 And then once once your  
NOTE Confidence: 0.995574  
01:29:12.445 --> 01:29:13.505 data is here,  
NOTE Confidence: 0.9832986  
01:29:14.284 --> 01:29:16.125 then under environments, when you  
NOTE Confidence: 0.9832986  
01:29:16.125 --> 01:29:17.184 create an environment,  
NOTE Confidence: 0.99950296  
01:29:17.564 --> 01:29:18.764 you'll actually be able to  
NOTE Confidence: 0.99950296  
01:29:18.764 --> 01:29:19.885 load that data into that  
NOTE Confidence: 0.99950296  
01:29:19.885 --> 01:29:20.385 environment.  
NOTE Confidence: 0.99055785  
01:29:21.250 --> 01:29:22.310 That answer your question?  
NOTE Confidence: 0.59618884  
01:29:23.729 --> 01:29:25.170 Yeah. It's on a solution  
NOTE Confidence: 0.59618884  
01:29:25.170 --> 01:29:25.909 where to.  
NOTE Confidence: 0.6041654  
01:29:27.729 --> 01:29:28.389 I can.  
NOTE Confidence: 0.93584764  
01:29:55.729 --> 01:29:57.170 Alright. That yeah. You need  
NOTE Confidence: 0.93584764

01:29:57.170 --> 01:29:58.530 to have a YNHH account  
NOTE Confidence: 0.93584764

01:29:58.530 --> 01:29:59.350 to get here.  
NOTE Confidence: 0.9983437

01:30:00.290 --> 01:30:01.110 This is  
NOTE Confidence: 0.8667945

01:30:01.490 --> 01:30:03.330 this is actually on which  
NOTE Confidence: 0.8667945

01:30:03.330 --> 01:30:03.830 is,  
NOTE Confidence: 0.9286055

01:30:04.895 --> 01:30:06.094 is this which one of  
NOTE Confidence: 0.9286055

01:30:06.094 --> 01:30:07.935 your links on your yeah.  
NOTE Confidence: 0.9286055

01:30:07.935 --> 01:30:10.094 Rich Rich's portion of the  
NOTE Confidence: 0.9286055

01:30:10.094 --> 01:30:11.535 presentation had the link to  
NOTE Confidence: 0.9286055

01:30:11.535 --> 01:30:12.035 Helix,  
NOTE Confidence: 0.9961113

01:30:12.415 --> 01:30:13.555 but this is the actual,  
NOTE Confidence: 0.9981322

01:30:14.175 --> 01:30:14.995 live website.  
NOTE Confidence: 0.9633641

01:30:18.094 --> 01:30:18.995 And, yeah, it's  
NOTE Confidence: 0.9766246

01:30:24.960 --> 01:30:26.580 yeah, it's it's pretty straightforward  
NOTE Confidence: 0.9766246

01:30:26.719 --> 01:30:27.760 once you start entering the  
NOTE Confidence: 0.9766246

01:30:27.760 --> 01:30:28.660 data in there.

NOTE Confidence: 0.9672735  
01:30:30.400 --> 01:30:30.900 Question?  
NOTE Confidence: 0.98639596  
01:30:44.920 --> 01:30:46.460 Yeah. It does. It just  
NOTE Confidence: 0.93387926  
01:30:51.960 --> 01:30:53.000 didn't even think of it.  
NOTE Confidence: 0.93387926  
01:30:53.000 --> 01:30:54.600 Could you get a gold  
NOTE Confidence: 0.93387926  
01:30:54.600 --> 01:30:55.100 star.  
NOTE Confidence: 0.95387375  
01:30:57.000 --> 01:30:57.500 Yes.  
NOTE Confidence: 0.95930994  
01:31:02.585 --> 01:31:03.545 Great question. So if you  
NOTE Confidence: 0.95930994  
01:31:03.545 --> 01:31:04.985 have custom data, I'm I'm  
NOTE Confidence: 0.95930994  
01:31:04.985 --> 01:31:06.744 gonna let Rich field this  
NOTE Confidence: 0.95930994  
01:31:06.744 --> 01:31:07.244 one.  
NOTE Confidence: 0.8998819  
01:31:07.945 --> 01:31:09.304 If you have custom data  
NOTE Confidence: 0.8998819  
01:31:09.545 --> 01:31:10.425 and I'll tell you when  
NOTE Confidence: 0.8998819  
01:31:10.425 --> 01:31:11.304 I field it, and then  
NOTE Confidence: 0.8998819  
01:31:11.304 --> 01:31:12.025 you can tell me where  
NOTE Confidence: 0.8998819  
01:31:12.025 --> 01:31:12.684 I'm wrong.  
NOTE Confidence: 0.96388406

01:31:13.370 --> 01:31:14.570 If you have custom data,  
NOTE Confidence: 0.96388406

01:31:14.570 --> 01:31:15.610 you'll be working with one  
NOTE Confidence: 0.96388406

01:31:15.610 --> 01:31:16.910 of the JADAT team.  
NOTE Confidence: 0.9939786

01:31:17.610 --> 01:31:19.050 Somebody from Rich's team will  
NOTE Confidence: 0.9939786

01:31:19.050 --> 01:31:19.950 work with you  
NOTE Confidence: 0.9970669

01:31:20.410 --> 01:31:22.030 to load that data,  
NOTE Confidence: 0.9996903

01:31:23.050 --> 01:31:23.550 into  
NOTE Confidence: 0.8856891

01:31:24.170 --> 01:31:25.835 Camino in the chip. That's  
NOTE Confidence: 0.8856891

01:31:25.835 --> 01:31:27.035 probably the best answer. There  
NOTE Confidence: 0.8856891

01:31:27.035 --> 01:31:28.475 are some things going on  
NOTE Confidence: 0.8856891

01:31:28.475 --> 01:31:29.695 as you're aware of to  
NOTE Confidence: 0.8856891

01:31:29.835 --> 01:31:31.455 map directories in the DDI,  
NOTE Confidence: 0.8024789

01:31:31.755 --> 01:31:32.495 the CHP.  
NOTE Confidence: 0.55509365

01:31:32.875 --> 01:31:34.075 That's not a single type  
NOTE Confidence: 0.55509365

01:31:34.075 --> 01:31:35.275 of process. So for some  
NOTE Confidence: 0.55509365

01:31:35.275 --> 01:31:36.955 time use, I would remove

NOTE Confidence: 0.55509365

01:31:36.955 --> 01:31:37.935 the new point.

NOTE Confidence: 0.9335598

01:31:41.220 --> 01:31:42.920 Right. Any other questions?

NOTE Confidence: 0.95826197

01:31:45.300 --> 01:31:46.360 Alright. Thank you.