```
WEBVTT
00:00:27.770 --> 00:00:29.010
Hector Rogel Jr.: Hey? How's it going, Richard?
2
00:00:30.830 --> 00:00:33.890
Richard Hoehn: Good, good actor, how are you doing
00:00:33.890 --> 00:00:34.840
Hector Rogel Jr.: I'm doing good.
00:00:38.050 --> 00:00:40.695
Hector Rogel Jr.: Yeah, this is taking a lot longer than I thought
00:00:47.520 --> 00:00:48.070
Richard Hoehn: Don't worry.
00:00:48.070 --> 00:00:48.400
Isaiah: We all day
7
00:00:48.400 --> 00:00:49.000
Richard Hoehn: Library.
00:00:49.100 --> 00:00:51.110
Richard Hoehn: You in the library, too, Isaiah
9
00:00:51.383 --> 00:00:54.659
Isaiah: I'm in one of those little pod things that they have. Now.
10
00:00:55.030 --> 00:00:55.920
Richard Hoehn: Okay.
11
00:00:56.860 --> 00:01:01.300
Richard Hoehn: yeah, I probably should be in 1, 2. But I'm I'm way in
the corner. What floor are you on?
```

12

00:01:01.878 --> 00:01:03.420 Isaiah: I'm on the second floor

```
13
00:01:03.420 --> 00:01:06.372
Richard Hoehn: Okay, yeah, I'm I'm all the way at the top kind of
thing.
14
00:01:06.600 --> 00:01:07.430
Isaiah: Oh, okay.
15
00:01:15.450 --> 00:01:19.360
Richard Hoehn: Now let me make sure our AI companion is on.
00:01:24.490 --> 00:01:37.710
Richard Hoehn: Okay. It's all good. Oh, side comment. I. I went over
to Dr. Wallen's office and kind of chatted with him, and he put a post
and note on his computer to look at our
17
00:01:37.820 --> 00:01:39.370
Richard Hoehn: 1st grade. Kind of thing
18
00:01:39.370 --> 00:01:40.150
Isaiah: Perfect.
19
00:01:40.430 --> 00:01:43.475
Richard Hoehn: So we'll see.
00:01:44.490 --> 00:01:47.190
Richard Hoehn: I mean, it's hopefully, something will be better than
nothing. Right?
21
00:01:47.510 --> 00:01:53.439
Richard Hoehn: Yeah, yeah. I've he's really really busy, he said, with
all sorts of other classes. Kind of thing, so
22
00:01:53.680 --> 00:01:54.300
Isaiah: Sure.
23
00:01:55.410 --> 00:02:00.450
Richard Hoehn: But yeah, hopefully, hopefully, we'll get to it.
```

```
24
00:02:01.110 --> 00:02:01.550
Isaiah: Yeah.
25
00:02:03.440 --> 00:02:04.570
Richard Hoehn: All right.
26
00:02:06.680 --> 00:02:07.685
Richard Hoehn: Let me see.
27
00:02:10.930 --> 00:02:18.630
Richard Hoehn: I'm not too upset that we can't get to the results. By
the way, guys, I mean, we're trying to compare ourselves to open AI
right? A little bit.
28
00:02:18.750 --> 00:02:20.029
Richard Hoehn: Yeah. So
00:02:21.190 --> 00:02:23.059
Isaiah: Maybe just a little bit of hubris. There
30
00:02:26.080 --> 00:02:28.559
Richard Hoehn: Yeah, I mean, I got
00:02:29.040 --> 00:02:36.889
Richard Hoehn: it was done the 50,000 epochs. But that's still, you
know, that's still 20 times away from a million. Right? So
32
00:02:37.290 \longrightarrow 00:02:40.680
Isaiah: I mean, that's a lot. But that's not anywhere near enough
33
00:02:45.020 --> 00:02:50.979
Richard Hoehn: so maybe we write about that. And then you try to do
something to hector just to see or
34
00:02:51.580 --> 00:02:56.079
Hector Rogel Jr.: I mean, like I'm I'm running it right now, right
now. I'm at 32,000 epoch
```

```
00:02:56.580 --> 00:02:57.070
Isaiah: Oh, wow!
36
00:02:57.070 --> 00:02:57.600
Richard Hoehn: Okay.
37
00:02:58.970 --> 00:03:00.490
Isaiah: Where are you running that
38
00:03:00.490 --> 00:03:04.420
Hector Rogel Jr.: On my laptop. It has its own Gpu
39
00:03:04.800 --> 00:03:06.939
Isaiah: Oh, okay, that makes more sense
40
00:03:08.570 --> 00:03:10.339
Isaiah: Yeah, I haven't even tried it on mine.
41
00:03:11.470 --> 00:03:19.079
Richard Hoehn: Yeah, I don't. I don't have. I mean, I've got a macbook
that I don't think they expose the Gpu or not. At least it's not a I
don't think it's an Nvidia
42
00:03:19.310 --> 00:03:19.990
Hector Rogel Jr.: -
43
00:03:20.830 --> 00:03:21.420
Isaiah: Yeah.
44
00:03:22.870 --> 00:03:23.630
Richard Hoehn: And
45
00:03:24.160 --> 00:03:29.420
Isaiah: It's a if it's a m. Series map book. It might not do badly,
but I thought it was gonna do any better than
46
00:03:29.770 --> 00:03:31.559
Richard Hoehn: Like what we had on the cluster.
```

```
47
00:03:32.540 --> 00:03:37.120
Richard Hoehn: Yeah, yeah, let me see what I even have
48
00:03:41.860 --> 00:03:45.570
Isaiah: But you know, I think for the report. We just stay like
49
00:03:46.840 --> 00:03:52.730
Isaiah: they say you can run it on a single Gpu, and you technically
can.
50
00:03:56.720 --> 00:03:58.030
Isaiah: Yeah, exactly.
51
00:04:01.220 --> 00:04:04.009
Isaiah: I mean, I guess it technically, if it's on a single Gpu like
52
00:04:04.440 --> 00:04:07.469
Isaiah: training, Gpt, 4 would not fit on a single Gpu
00:04:07.650 --> 00:04:08.090
Hector Rogel Jr.: -
54
00:04:10.040 --> 00:04:10.770
Isaiah: I don't know
55
00:04:16.839 --> 00:04:22.670
Richard Hoehn: I think we maybe spend more time on just writing. You
know what we did, you know.
56
00:04:22.930 --> 00:04:24.860
Richard Hoehn: Do a good job of kind of
57
00:04:25.030 --> 00:04:32.530
Richard Hoehn: listing, you know all the steps we did, and the little
gotchas we had here and there, and then
58
00:04:32.530 --> 00:04:35.580
Isaiah: Like, make sure our methodology is really sound.
```

```
59
00:04:35.910 --> 00:04:36.620
Richard Hoehn: Hmm.
60
00:04:37.650 --> 00:04:42.219
Richard Hoehn: Then then say, you know, hey couldn't get to it. Kind
of thing. This is our graph.
61
00:04:42.860 --> 00:04:43.700
Richard Hoehn: So
62
00:04:44.331 --> 00:04:46.549
Isaiah: Yeah, I'll pretty that graph up. Make it look slightly better
63
00:04:51.920 --> 00:04:55.520
Hector Rogel Jr.: Were you supposed to write any code because I did
everything within the Powershell
64
00:04:56.852 --> 00:05:01.049
Isaiah: Yeah, like, I don't know for this, we're not really writing
like a ton of code
65
00:05:01.710 --> 00:05:08.510
Richard Hoehn: No, no, I put. I put their code in our
66
00:05:09.080 --> 00:05:13.840
Richard Hoehn: repo, although I kind of made it a module, so it
doesn't really show up
67
00:05:14.400 --> 00:05:15.419
Isaiah: I saw that. Yes.
68
00:05:15.420 --> 00:05:15.960
Richard Hoehn: So we
00:05:15.960 --> 00:05:16.630
Isaiah: Whatever
```

```
00:05:16.780 --> 00:05:17.400
Richard Hoehn: Hmm!
71
00:05:18.100 --> 00:05:22.450
Richard Hoehn: Maybe just even though that's the way to do it. Maybe
we should just kind of
72
00:05:26.520 --> 00:05:29.359
Richard Hoehn: we could copy and paste that code in there
00:05:29.570 --> 00:05:30.230
Isaiah: Yeah.
74
00:05:30.370 --> 00:05:34.540
Richard Hoehn: And then I don't know. Maybe we do.
75
00:05:35.120 --> 00:05:41.080
Richard Hoehn: You know, if we have code making the graphics that
might be, you know, some code we could put in
76
00:05:41.580 --> 00:05:42.829
Isaiah: Yeah, I have that in there.
77
00:05:45.770 --> 00:05:47.620
Richard Hoehn: Gonna read me or so
78
00:05:48.180 --> 00:05:48.710
Isaiah: Yeah.
00:05:56.240 --> 00:05:58.529
Isaiah: But yeah, I feel like it looks pretty good right now.
80
00:05:59.200 --> 00:06:01.269
Isaiah: we just need to focus on our write up now.
81
00:06:01.750 --> 00:06:02.610
Richard Hoehn: Okay.
```

```
00:06:02.610 --> 00:06:03.890
Isaiah: Get that squared away
83
00:06:04.570 --> 00:06:05.120
Richard Hoehn: No.
00:06:10.360 --> 00:06:14.510
Karson Woods: How do you want to do that, then, for the write up in
terms of split it up
85
00:06:15.640 --> 00:06:17.270
Isaiah: That's a good question.
86
00:06:21.218 --> 00:06:23.180
Isaiah: I'm just looking at what we have right now.
87
00:06:24.550 --> 00:06:30.060
Isaiah: I can talk about the environment setup cause
88
00:06:31.200 --> 00:06:33.350
Isaiah: I spent a while getting that figured out
89
00:06:37.030 --> 00:06:39.060
Richard Hoehn: Yeah, that would be good.
90
00:06:46.760 --> 00:06:55.229
Richard Hoehn: I mean, I could. I could. We could talk about results.
I guess we talk about the ethics, repress challenges. That's an easy
one.
91
00:06:55.380 --> 00:06:56.340
Isaiah: Yeah.
92
00:06:56.340 --> 00:07:02.349
Richard Hoehn: Resource consideration. We've got a good one there.
Scientific integrity implications, I guess. Could
93
00:07:02.970 --> 00:07:11.630
Richard Hoehn: we could be like, well, yeah, it it is a Gpu, and if we
```

```
unrealistic.
94
00:07:11.890 --> 00:07:12.450
Isaiah: Yeah.
00:07:12.450 --> 00:07:12.870
Richard Hoehn: So.
96
00:07:12.870 --> 00:07:18.789
Isaiah: Yeah, I find it especially concerning how it looks like it's
not scaling linearly
97
00:07:20.900 --> 00:07:24.870
Isaiah: with, like, you know, for the number of epochs it gets gets
slower as it goes.
98
00:07:25.410 --> 00:07:26.400
Isaiah: They didn't mention
99
00:07:26.400 --> 00:07:26.860
Karson Woods: I'm anywhere.
100
00:07:26.860 --> 00:07:27.840
Isaiah: And the paper
101
00:07:28.760 --> 00:07:29.390
Richard Hoehn: Then.
102
00:07:30.410 --> 00:07:40.240
Richard Hoehn: yeah, the code seemed to kind of do like a logarithmic
step. Did you see that in the code? Some like they had 1,000
103
00:07:40.240 --> 00:07:41.270
Isaiah: Oh, yeah, they're like.
104
00:07:41.270 --> 00:07:41.669
Richard Hoehn: That is right.
```

wait, you know 20 days we we might be done. But that that seems

```
105
00:07:41.670 --> 00:07:42.340
Isaiah: Right.
106
00:07:42.580 --> 00:07:43.420
Richard Hoehn: Yeah.
107
00:07:43.420 --> 00:07:47.469
Isaiah: Oh, so their learning rate probably just gets like Super Tiny
at the end
108
00:07:48.370 --> 00:07:49.530
Isaiah: All those epochs.
109
00:07:50.290 --> 00:07:52.619
Richard Hoehn: That's maybe why it slows down
110
00:07:52.620 --> 00:07:54.700
Isaiah: Oh, yeah, that would make sense.
111
00:07:55.050 --> 00:07:57.260
Isaiah: because you're just doing so. So little
112
00:07:58.190 --> 00:07:58.860
Richard Hoehn: And
113
00:08:01.240 --> 00:08:06.080
Isaiah: You have to wonder if you're doing a logarithmic rate out to a
million epochs like, are you even like
114
00:08:06.270 --> 00:08:10.260
Isaiah: still within precision of your numbers at the end of that
115
00:08:11.070 --> 00:08:11.880
Richard Hoehn: Hmm.
116
00:08:14.540 --> 00:08:17.819
Isaiah: I don't know. I think that they would be smart about that. But
who knows
```

```
117
00:08:24.780 --> 00:08:25.290
Karson Woods: Yes.
118
00:08:25.290 --> 00:08:32.609
Richard Hoehn: No, I mean, we chose a little bit of a paper right? I
mean, I'm not quite sure I see the practical applications of this.
119
00:08:33.233 --> 00:08:38.879
Richard Hoehn: You know, training something fairly simple a million a
million times seems a little
120
00:08:40.110 --> 00:08:41.260
Isaiah: A little overkill
121
00:08:41.260 --> 00:08:42.799
Richard Hoehn: What are you going to use it for
122
00:08:50.830 --> 00:08:53.479
Isaiah: It's an interesting concept, though I really like the idea
123
00:08:55.520 --> 00:08:56.380
Richard Hoehn: Yeah.
124
00:08:59.990 --> 00:09:09.289
Richard Hoehn: So I'm on the Google, Doc, did we want to just assign
maybe our initials to certain sections here that we have. And then we
just crank through it. Guys.
125
00:09:09.660 --> 00:09:11.209
Richard Hoehn: yeah, in fact, of that. Yeah.
126
00:09:11.210 --> 00:09:12.200
Karson Woods: That works.
127
00:09:12.200 --> 00:09:18.000
Richard Hoehn: Yeah. So environment setup, I kind of made a header. So
that's you, Isaiah
```

```
128
00:09:20.310 --> 00:09:24.969
Richard Hoehn: data processing steps. What do you think he means by
129
00:09:26.057 --> 00:09:33.189
Isaiah: So I think I don't think we really need that step because our
code was unique is that the data was like contained with
130
00:09:34.630 --> 00:09:39.229
Isaiah: I mean, if we were having to like download Csvs and like, do
data cleaning and stuff, I think that's probably what we got there
131
00:09:39.513 --> 00:09:43.479
Richard Hoehn: So we could maybe write that we didn't have to do that.
I'll just
132
00:09:44.410 --> 00:09:44.840
Isaiah: Yeah.
133
00:09:44.840 --> 00:09:45.830
Richard Hoehn: Okay.
134
00:09:45.830 --> 00:09:47.850
Isaiah: Make a note that we didn't have to
135
00:09:52.790 --> 00:09:54.380
Richard Hoehn: Okay, results.
136
00:10:09.070 --> 00:10:12.760
Richard Hoehn: I can write about this reproducibility
137
00:10:21.530 --> 00:10:26.620
Karson Woods: I guess I can do resource considerations and scientific
scientific integrity. Then maybe
138
00:10:27.270 --> 00:10:29.520
Richard Hoehn: Something else, if need be.
```

```
00:10:29.520 --> 00:10:30.590
Isaiah: Yeah, sounds good.
140
00:10:34.240 --> 00:10:35.910
Richard Hoehn: Okay, so let's here.
141
00:10:41.960 --> 00:10:44.130
Richard Hoehn: discrepancy analysis.
142
00:10:44.460 --> 00:10:47.530
Richard Hoehn: That's also a short one. I would think right
143
00:10:48.640 --> 00:10:51.240
Isaiah: I mean the discrepancy is, it just doesn't work.
144
00:10:55.820 --> 00:10:58.400
Isaiah: I think this is probably gonna be on the shorter end
145
00:10:58.560 --> 00:11:00.799
Richard Hoehn: For our reports. Honestly.
146
00:11:09.880 --> 00:11:14.389
Richard Hoehn: Victor, do you want to do this best practices or
process improvements
147
00:11:14.735 --> 00:11:17.499
Hector Rogel Jr.: Yeah, I'll go ahead and do those, too.
148
00:11:17.500 --> 00:11:18.349
Richard Hoehn: Yeah, yeah.
149
00:11:18.350 --> 00:11:18.980
Isaiah: Yeah, cool.
150
00:11:20.580 --> 00:11:25.270
Richard Hoehn: So description is, should I just do like it? Didn't
work kind of thing
```

```
00:11:25.430 --> 00:11:26.060
Isaiah: Basically
152
00:11:26.060 --> 00:11:29.630
Richard Hoehn: And okay, okay.
153
00:11:38.450 --> 00:11:42.099
Isaiah: I can do the like. The paper, summary and introduction. If you
all want me to
154
00:11:44.250 --> 00:11:45.050
Richard Hoehn: Okay.
155
00:11:51.570 --> 00:11:52.860
Richard Hoehn: Oh, okay.
156
00:11:54.190 --> 00:11:55.460
Richard Hoehn: Cool. Yeah.
157
00:12:03.330 --> 00:12:06.560
Hector Rogel Jr.: Like. Don't we also have to document the steps that
we went through
158
00:12:08.280 --> 00:12:13.850
Richard Hoehn: Yeah, that's the environment setup, I think is, is, was
was the big one. I would say
159
00:12:14.030 --> 00:12:14.790
Isaiah: Yeah.
160
00:12:15.040 --> 00:12:18.312
Richard Hoehn: And maybe the data data processing steps.
161
00:12:20.180 --> 00:12:26.620
Richard Hoehn: you know, maybe maybe I could put a screenshot the
small one of the Hpc. What we did. Did I read in 48 h
162
00:12:27.283 --> 00:12:28.290
Richard Hoehn: or so
```

```
163
00:12:28.800 --> 00:12:30.050
Isaiah: Yeah, we could do that
164
00:12:30.230 --> 00:12:30.900
Richard Hoehn: Yeah.
165
00:12:32.080 --> 00:12:40.120
Richard Hoehn: I I think there's 1 of these. No, quite right, answers
right? We just show what we did and talk about it. And and I bet we're
166
00:12:40.290 --> 00:12:44.199
Richard Hoehn: we're doing pretty good, I mean. So he was saying, you
know, like
167
00:12:44.470 --> 00:12:59.162
Richard Hoehn: and I, you know, what are there? 24 students, 25 in our
class. I mean, you know, he said it. It takes him forever to grade the
the tests. He he's not done with it, you know, I said, Hey, are you
done even with this stuff? And he's like, No.
168
00:13:00.450 --> 00:13:01.110
Richard Hoehn: there's no way.
169
00:13:01.630 --> 00:13:02.440
Richard Hoehn: Yeah.
170
00:13:03.190 --> 00:13:06.410
Richard Hoehn: So oh, yeah.
171
00:13:08.250 --> 00:13:10.839
Isaiah: Yeah, I'm sure grading takes forever.
172
00:13:10.990 --> 00:13:14.219
Isaiah: especially with all the short answer questions that we have to
do and everything
173
00:13:14.840 --> 00:13:15.265
Karson Woods: Hmm!
```

```
174
00:13:23.350 --> 00:13:27.570
Karson Woods: Oh, did you ever get the project one? Did we ever get
that figured out
175
00:13:28.020 --> 00:13:28.400
Richard Hoehn: Oh!
176
00:13:28.400 --> 00:13:29.080
Karson Woods: Serious.
177
00:13:29.080 --> 00:13:39.849
Richard Hoehn: Yeah, you you weren't on. So I I went actually to his
office today, like, literally this afternoon. And he put a post it
note on his computer to look at it. So
178
00:13:40.480 --> 00:13:45.560
Richard Hoehn: so hope so. I think he went. He might. Here, we'll see.
Yeah.
179
00:13:46.320 --> 00:13:50.280
Richard Hoehn: He he didn't forget. Well, he had forgotten until I
told, but
180
00:13:50.620 --> 00:13:51.800
Isaiah: He knew he was going to
181
00:13:52.702 --> 00:14:00.687
Richard Hoehn: Yeah. And I just said, Hey, look, our group knows
you're really busy. We didn't want to hound you on it, you know.
182
00:14:01.550 --> 00:14:02.779
Richard Hoehn: so so we don't want
183
00:14:02.780 --> 00:14:06.149
Isaiah: We thank you, but we would also like a better grade
184
00:14:06.150 --> 00:14:09.920
Richard Hoehn: Yeah, yeah, sure.
```

```
185
00:14:11.520 --> 00:14:15.280
Richard Hoehn: Yeah, cool.
186
00:14:20.770 --> 00:14:29.700
Richard Hoehn: yeah. And he kind of asked me how it's going. I said, I
don't know. Like the last one I didn't think was very interesting. I
think I don't think we
187
00:14:30.300 --> 00:14:35.529
Richard Hoehn: had a good time doing that housing bias stuff, but this
one was more fun
188
00:14:39.350 --> 00:14:40.030
Richard Hoehn: No.
189
00:14:47.070 --> 00:14:57.009
Karson Woods: Oh, yeah, I might need to ask about the resource
considerations like later, if that's fine, I guess either your Isaiah,
Richard Isaiah. So I wasn't too sure what you'll
190
00:14:57.150 --> 00:14:59.120
Karson Woods: did for that, for the Hpc.
191
00:15:00.318 --> 00:15:01.669
Richard Hoehn: Tell me what? What?
192
00:15:01.810 --> 00:15:04.300
Karson Woods: For the resource. Considerations like
193
00:15:04.890 --> 00:15:09.469
Richard Hoehn: Oh, okay, yeah. What? I what I used as to say.
194
00:15:09.470 --> 00:15:09.940
Karson Woods: Yeah.
195
00:15:09.940 --> 00:15:10.650
Richard Hoehn: But
```

```
196
00:15:14.700 --> 00:15:17.629
Karson Woods: Well, like, send me an email or something with it.
197
00:15:17.800 --> 00:15:18.630
Richard Hoehn: Okay.
198
00:15:18.850 --> 00:15:19.320
Isaiah: Yeah.
00:15:19.320 --> 00:15:25.759
Richard Hoehn: You know, or just put some notes like I think, with
under the ethics discussion. It's a little bit more, you know.
200
00:15:27.277 --> 00:15:30.379
Richard Hoehn: You know it works on a Gpu, but
201
00:15:30.680 --> 00:15:31.100
Karson Woods: Have to
202
00:15:31.100 --> 00:15:32.820
Richard Hoehn: Wait 20 days.
203
00:15:32.820 --> 00:15:36.190
Karson Woods: Okay, yeah, it just seems like ridiculous. Yeah.
204
00:15:36.640 --> 00:15:38.619
Karson Woods: okay, that makes a bit more sense.
205
00:15:38.620 --> 00:15:42.640
Richard Hoehn: Yeah, I am actually not quite sure how I know.
206
00:15:48.620 --> 00:15:55.260
Richard Hoehn: Dart. I don't know how I know what the resources are
that I got
207
00:15:57.045 --> 00:16:03.220
Isaiah: You can do. If you're logged in, you can do like Nvidia Smi,
or something on your command line
```

```
208
00:16:03.220 --> 00:16:04.700
Richard Hoehn: Yeah, let me see here.
209
00:16:04.840 --> 00:16:09.330
Richard Hoehn: So you just so, this is, this is the Hpc cluster.
Right? So
210
00:16:16.320 --> 00:16:20.530
Richard Hoehn: I did this research 48 h. This is
211
00:16:20.640 --> 00:16:23.999
Richard Hoehn: my old, old deep learning account, I guess.
212
00:16:25.860 --> 00:16:28.400
Richard Hoehn: So you should launch it and see what happens.
213
00:16:29.620 --> 00:16:30.370
Isaiah: Sure. That's fine.
214
00:16:31.170 --> 00:16:32.340
Richard Hoehn: Cute.
215
00:16:38.100 --> 00:16:40.099
Richard Hoehn: Okay? So now I can.
216
00:16:46.120 --> 00:16:49.199
Richard Hoehn: And you say, with the terminal, I can figure that out
217
00:16:49.815 --> 00:16:55.190
Isaiah: Yeah, here's the command for it, I think
218
00:16:59.560 --> 00:17:01.900
Richard Hoehn: Oh, yeah, yeah, there you go.
219
00:17:03.370 --> 00:17:06.510
Richard Hoehn: so I can. If you want, I'll make a screenshot
```

```
220
00:17:07.280 --> 00:17:08.650
Karson Woods: Yeah, that works
221
00:17:09.950 --> 00:17:15.400
Richard Hoehn: Like this, maybe good, and I'll just
222
00:17:19.940 --> 00:17:22.289
Isaiah: I mean, it's got a fairly decent gpu on it.
223
00:17:26.770 --> 00:17:32.699
Richard Hoehn: And then can I just put it in our repo? Is that okay?
224
00:17:33.010 --> 00:17:35.340
Isaiah: Yeah, that works Google, Doc.
225
00:17:35.540 --> 00:17:36.359
Karson Woods: Oh, yeah.
226
00:17:36.480 --> 00:17:39.659
Richard Hoehn: Okay, yeah, where is my Google? Doc.
227
00:17:40.220 --> 00:17:44.600
Hector Rogel Jr.: How long did it take to run the 50 50,000 epochs
228
00:17:45.240 --> 00:17:47.728
Richard Hoehn: Oh, like a a good day
229
00:17:48.800 --> 00:17:54.270
Richard Hoehn: So I started it with Isaiah. What? Maybe 4 the
afternoon
230
00:17:54.557 --> 00:17:57.140
Isaiah: You know, we could probably go back and look.
231
00:17:59.290 --> 00:18:04.660
Isaiah: I think it was a little earlier, but like well, on Sunday
afternoon.
```

```
232
00:18:10.220 --> 00:18:19.489
Richard Hoehn: yeah, so does it even show me? So I'm on a, i'm on this
G force here, okay, so that's whatever this is the rtx
233
00:18:20.050 --> 00:18:24.379
Isaiah: Yeah, you got your 12 GB of vram, or whatever
234
00:18:26.890 --> 00:18:28.664
Richard Hoehn: Yeah. Where do you see that
235
00:18:28.960 --> 00:18:31.999
Isaiah: Oh, over in that second column, like the 0 Mega
236
00:18:32.000 --> 00:18:33.149
Richard Hoehn: There it is. Oh, yeah, yeah.
237
00:18:33.150 --> 00:18:33.960
Isaiah: Yeah, yeah.
238
00:18:35.790 --> 00:18:39.349
Richard Hoehn: I guess. Should we try and run this thing again? Let's
see
239
00:18:40.082 --> 00:18:42.497
Richard Hoehn: do. Do you remember by heart?
240
00:18:46.237 --> 00:18:50.499
Isaiah: If you yeah, go up a little bit more.
241
00:18:52.720 --> 00:18:55.259
Isaiah: I think if you go into the Grok folder.
242
00:18:56.054 --> 00:18:56.310
Isaiah: Alright.
243
00:18:56.310 --> 00:18:58.510
Isaiah: Yeah, you need to source your environment first.st
```

```
244
00:18:58.510 --> 00:19:01.860
Richard Hoehn: Yeah, how did that do? You were just? If not, I can go
and look
245
00:19:01.860 --> 00:19:04.470
Isaiah: Of course. Hold on, I think I remember.
246
00:19:08.450 --> 00:19:10.169
Isaiah: and then you should just be able to do
247
00:19:10.170 --> 00:19:11.120
Richard Hoehn: Oh, yeah.
248
00:19:11.440 --> 00:19:13.749
Isaiah: Python script straight. Okay.
249
00:19:19.230 --> 00:19:23.100
Isaiah: yeah. Okay. And then if you go into your rock folder, I think
you can do the
250
00:19:23.260 --> 00:19:24.830
Isaiah: scripts train people.
251
00:19:26.230 --> 00:19:28.780
Isaiah: You could just run that trained at py script, and it'll
252
00:19:29.290 --> 00:19:30.949
Isaiah: take care of the rest of it. I think
253
00:19:41.940 --> 00:19:45.269
Richard Hoehn: There. Okay. So now, if I do this, guys
254
00:19:47.500 --> 00:19:48.760
Isaiah: Yeah, so we're just using it.
255
00:19:55.510 --> 00:19:59.500
Richard Hoehn: 21%, only a 16.
```

```
256
00:20:01.110 --> 00:20:04.850
Richard Hoehn: Okay. Here, I'll make a nice screenshot of this, too.
This might be kind of cool.
257
00:20:07.320 --> 00:20:11.729
Isaiah: Oh, yeah, to show that like, it's not as efficient as it could
be with your
258
00:20:13.100 --> 00:20:16.269
Isaiah: Resources like he could be using more
259
00:20:20.220 --> 00:20:27.000
Richard Hoehn: Yeah, I'll just put this in a Google Doc. And you can,
one of us can decide, okay.
260
00:20:27.110 --> 00:20:29.940
Hector Rogel Jr.: What, did you not increase your batch? Size.
261
00:20:31.910 --> 00:20:36.779
Isaiah: Can you increase your batch size, cause I haven't.
262
00:20:37.240 --> 00:20:39.229
Isaiah: I haven't messed around in any. That's just
263
00:20:39.230 --> 00:20:45.779
Richard Hoehn: I haven't. I didn't. I didn't touched a code, you know,
Hector, so I would. I mean
264
00:20:47.290 --> 00:20:51.290
Isaiah: Are you getting it to run fast? Well, I mean, I guess the
bigger bat size would run faster
265
00:20:52.850 \longrightarrow 00:20:54.190
Hector Rogel Jr.: And that's what I did
266
00:20:54.440 --> 00:20:58.779
Isaiah: Okay, I think it's in that training. Dot.
267
```

```
00:20:59.750 --> 00:21:00.550
Isaiah: PY,
268
00:21:00.550 --> 00:21:01.320
Richard Hoehn: Down here.
00:21:01.320 --> 00:21:04.379
Isaiah: Yeah, or where? Where did you change it? Hector?
270
00:21:06.590 --> 00:21:10.570
Hector Rogel Jr.: I mean. I did it all all through the Powershell
prompt in anaconda.
271
00:21:11.290 --> 00:21:12.870
Hector Rogel Jr.: It wasn't really cold
272
00:21:13.280 --> 00:21:17.590
Isaiah: Sure sure you didn't have to mess with any of the code itself.
273
00:21:17.800 --> 00:21:20.379
Hector Rogel Jr.: Not really no just like 2 lines.
274
00:21:21.760 --> 00:21:25.570
Richard Hoehn: Yeah, let me see where I found that did. It slows,
though
275
00:21:25.740 --> 00:21:27.668
Isaiah: Well, you know it could be
276
00:21:28.350 --> 00:21:32.989
Isaiah: That could be something else that we put in our report is
277
00:21:33.560 --> 00:21:35.910
Isaiah: they don't tell you how to change any of the options
278
00:21:36.050 --> 00:21:36.620
Hector Rogel Jr.: Hmm.
```

```
00:21:37.920 --> 00:21:41.579
Isaiah: There's not a lot of transparency about what's actually going
on when you run this
280
00:21:41.750 --> 00:21:42.430
Richard Hoehn: Yeah.
281
00:21:43.760 --> 00:21:46.050
Isaiah: Which isn't particularly helpful
282
00:21:58.420 --> 00:22:02.070
Richard Hoehn: Yeah, I cannot remember.
283
00:22:02.520 --> 00:22:07.739
Richard Hoehn: Here, see this, this is that that thing that
goes up and up and up
284
00:22:07.800 --> 00:22:09.090
Isaiah: Yeah, okay.
285
00:22:17.130 --> 00:22:19.390
Isaiah: I don't know. This is the messy code base.
286
00:22:19.870 --> 00:22:24.430
Isaiah: I I somehow expected open AI's code would be a little easier
to work with
287
00:22:25.690 --> 00:22:26.390
Karson Woods: Hmm.
288
00:22:27.150 --> 00:22:28.490
Isaiah: Buffets, you know.
289
00:22:31.710 --> 00:22:36.609
Richard Hoehn: Yeah, so it's running here right
290
00:22:39.380 --> 00:22:41.030
Isaiah: Yeah. And you can see that it is running
```

```
291
00:22:48.630 --> 00:22:50.179
Richard Hoehn: Yeah, it's even going down on
292
00:22:52.160 --> 00:22:55.780
Hector Rogel Jr.: But it it's in the 2080, from 2018
293
00:22:57.080 --> 00:22:59.950
Isaiah: Yeah, it's it's not a new
294
00:23:00.300 --> 00:23:01.090
Richard Hoehn: Hmm.
295
00:23:01.090 --> 00:23:02.730
Isaiah: It's not a new gpu, for sure.
296
00:23:06.540 --> 00:23:08.499
Isaiah: It's not like a 30, 90, or whatever.
297
00:23:18.380 --> 00:23:23.920
Isaiah: But what's also disappointing is they have one of these
cluster ones with like a a 100 or something.
298
00:23:24.370 --> 00:23:27.029
Isaiah: and it doesn't run any faster on the
299
00:23:27.550 --> 00:23:28.330
Hector Rogel Jr.: Does it?
300
00:23:28.520 --> 00:23:35.939
Isaiah: - now you might be able to like like you were saying mess with
the batch size and get it to run a lot faster, just because you have
so much more
301
00:23:36.550 --> 00:23:40.090
Isaiah: vram or whatever. But it's it's hard
302
00:23:40.484 --> 00:23:42.849
Hector Rogel Jr.: But isn't RAM also a problem
```

```
303
00:23:43.800 --> 00:23:48.030
Isaiah: Yeah, like, it's just
304
00:23:50.330 --> 00:23:51.720
Hector Rogel Jr.: Because right now, like you.
305
00:23:51.930 --> 00:23:53.150
Richard Hoehn: I'm sorry. Go ahead.
306
00:23:53.150 --> 00:23:53.490
Isaiah: Good.
307
00:23:53.490 --> 00:23:56.560
Hector Rogel Jr.: So right now, I'm running on 80% on on my RAM.
308
00:23:56.710 --> 00:23:57.859
Hector Rogel Jr.: So that's kind of
309
00:23:58.410 --> 00:23:58.900
Isaiah: Oh, wow!
310
00:23:58.900 --> 00:24:02.679
Hector Rogel Jr.: Going up, because my, my vram is just at point 8
311
00:24:03.680 --> 00:24:05.539
Isaiah: Huh! Well, that's interesting.
312
00:24:07.990 --> 00:24:12.080
Richard Hoehn: Yeah, I mean, according to this, there's plenty of RAM
left here
313
00:24:12.480 --> 00:24:13.190
Isaiah: Yeah.
314
00:24:16.820 --> 00:24:19.070
Richard Hoehn: I mean, we're not really using that much.
```

```
315
00:24:20.910 --> 00:24:23.900
Richard Hoehn: We're actually not really using this card much right?
But I guess
316
00:24:23.900 --> 00:24:24.320
Isaiah: -
317
00:24:24.320 --> 00:24:24.880
Richard Hoehn: Now.
318
00:24:28.010 --> 00:24:28.690
Richard Hoehn: So
319
00:24:33.370 --> 00:24:36.000
Richard Hoehn: okay, let me see if I can kill this
320
00:24:42.700 --> 00:24:45.889
Isaiah: But I think either way we've given it a we've given it a nice
solid try
321
00:24:47.280 --> 00:24:47.880
Karson Woods: Hmm.
322
00:24:52,220 --> 00:24:54,660
Hector Rogel Jr.: And finally I had 38,008 buck
323
00:24:55.480 --> 00:24:56.400
Isaiah: You're what
324
00:24:56.400 --> 00:24:57.529
Hector Rogel Jr.: 38,000,
325
00:24:58.760 --> 00:25:02.089
Isaiah: Yeah. Just takes forever.
326
00:25:02.940 --> 00:25:03.450
Richard Hoehn: Yeah.
```

```
327
00:25:06.060 --> 00:25:07.699
Isaiah: How long have you been running it, Hector?
328
00:25:08.640 --> 00:25:12.910
Isaiah: Well, I ran at 10 o'clock in the morning. Well, the thing is
like I didn't realize that I wasn't
329
00:25:13.720 --> 00:25:21.409
Hector Rogel Jr.: Using my gpu to its fullest potential. So like I had
it. So I had to mess with it a little bit to speed it up because it
was slow
330
00:25:21.670 --> 00:25:24.590
Isaiah: Oh, yeah, it was. It's ridiculous.
331
00:25:24.840 --> 00:25:26.340
Hector Rogel Jr.: But now it's going a lot faster
332
00:25:27.710 --> 00:25:28.300
Isaiah: Yeah.
333
00:25:35.460 --> 00:25:42.190
Richard Hoehn: Well, let's see. So I I think we've got it marked on
our word document. Pretty good.
334
00:25:42.800 --> 00:25:43.760
Richard Hoehn: We'll give it a
335
00:25:43.760 --> 00:25:44.280
Isaiah: Be good.
336
00:25:44.280 --> 00:25:47.640
Richard Hoehn: Good go make it pretty. And
337
00:25:48.240 --> 00:25:58.119
Richard Hoehn: and then we do, we want to just kind of do our usual.
We'll kind of meet up per se by 10 on Wednesday we need everything
done. Button up
```

```
338
00:25:59.440 --> 00:26:00.250
Isaiah: Yeah, I'm fine with that
339
00:26:00.250 --> 00:26:00.800
Karson Woods: Yes.
340
00:26:01.620 --> 00:26:02.190
Richard Hoehn: Time.
341
00:26:05.990 --> 00:26:14.270
Richard Hoehn: Okay, yeah. I'll be one more down, I think. Then we've
got 2 more or 3 more to go
342
00:26:15.120 --> 00:26:15.540
Karson Woods: This
343
00:26:15.540 --> 00:26:16.190
Hector Rogel Jr.: A few more.
344
00:26:16.190 --> 00:26:18.030
Richard Hoehn: 2 more. Now I see
345
00:26:18.030 --> 00:26:18.959
Isaiah: 6 and 7.
346
00:26:19.170 --> 00:26:19.880
Isaiah: What are they?
347
00:26:20.990 --> 00:26:24.170
Karson Woods: The last one's AI. I don't remember what the 6th one was
348
00:26:24.170 --> 00:26:26.489
Isaiah: Oh, yeah, the last one's AI. That's gonna be fun.
349
00:26:27.030 --> 00:26:30.720
Richard Hoehn: Yeah, he doesn't even know what he wants to do yet.
Right? He said on that. So
```

```
350
00:26:30.970 --> 00:26:34.350
Karson Woods: Yeah, I just see.
351
00:26:34.740 --> 00:26:35.729
Isaiah: Oh, that'd be fun!
352
00:26:44.486 --> 00:26:44.963
Isaiah: Cool.
353
00:26:49.200 --> 00:26:50.040
Richard Hoehn: Right.
354
00:26:53.580 --> 00:26:54.930
Karson Woods: I guess that's it.
355
00:26:55.300 --> 00:26:56.410
Isaiah: Yeah, I think so.
356
00:26:56.950 --> 00:26:57.690
Karson Woods: Alright!
357
00:26:59.930 --> 00:27:07.850
Richard Hoehn: Okay, I guess we'll talk talk. Wednesday. We can kind
of chat on our discussion thing and then see how we do it. Okay.
358
00:27:08.030 --> 00:27:08.810
Isaiah: All right.
359
00:27:08.810 --> 00:27:09.430
Karson Woods: That's good. Guys.
360
00:27:09.890 --> 00:27:11.190
Karson Woods: Take care, guys, bye.
```