

Audio file

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Transcript

Speaker 1

Welcome, everyone, to the October 29th, 2025 session of our further experiments in artificial intelligence. As I was explaining to everyone right before we began, these are instances of Minkowski's surfaces would show a black hole or other event bending the fabric of space-time, which is the fourth dimension. And if you are not up to things, so these are three instances that it drew of that, and I thought that would be a good idea that imagine this being in a physics class, astrophysics class, having AI do these drawings for people. That's one of the elements we haven't really discussed is using AI as a self instruction tool. And As I try to do each time, let's start it out with a cartoon that I was able to find in Funny Times, which is one of my favorite magazines that I get monthly, which is a series of cartoons, political cartoons. And this one's the AI one here with a mom standing over their child who's got a Xbox playing on his TV and mom has got a hands on her hips and saying, you get upstairs right now and tell ChatGPT to finish your homework, which I thought was pretty good. It was one of the articles, which is about Cal State, the picking up AI coursework for students. and how that will be, they'll be coming out of college with how to build AIs. And then the other article that I distributed is what happens to the understanding of people once they begin using AIs too much. And that article took me back to the movie Wall-E. I don't know if you all saw that. If you remember at the last part of the session last week, they came up with a discussion of mathematical form, mathematical concepts that are included in AI. Wouldn't you have it the next day? I get a image. that fits exactly what that discussion was. And what it was is this phenomenon right here was what we were discussing about tensor, the term tensor. And it took me a long time to understand it. It is three-dimensional data structures. Multi-dimensional arrays for people who know computer programming. And one thing that I discovered way back, even before we started with AI in 2022, in the fall of 2022, two years ago, just two years ago, was how Google developed PageRank. You remember the two guys that started Google, Larry Page and a Russian fellow. I can't remember his name right now. They use matrix algebra. Each of their archived page items had this kind of data structure attached to it. And they use that to build the pages that we used to get from Google. Now they're using 10 source, 3

dimensional array arrays. And advanced AIs are using 4, 500 dimensional arrays. Way beyond my ability to think, but there are human beings in that. That world. So this is what we've been dealing with so far. These terms should be meaningful to you as we. As I read them off prompt what you give the instructions you give to the AI inference from statistics, what do you infer from your? formulas that you've, the procedures that you've run against your statistical data. The inference, what is the inference? That's the result that the AI gives. Large language modules, multimedia language models. This is what we're using day in, day out now. And small language models, is what they're trying to put on smartphones now. Multimodal. I should get my natural language processing model from the first session. Natural language processing. Artificial general intelligence. Remember, AI being smarter than all human beings at every instance. Retrieval augmented generation. This is what we'll see all the time now. Nowadays is the AI going out. Tokens. It doesn't deal with words. It deals with the mathematical representation of the tokens and the way that they're put together, the relation between language, the words or the word segments at within large corpuses of languages, corpuses. Compute is the large data centers that are being put together with. I found out that each component within that The data center is 5 half million dollar computer and they've got 1000 of those within the data center. They're now talking about 10,000 half million dollar computers. We're going to go, this is the next two weeks, hallucinations and the algorithms that are used. models, frontier models being the stuff that are in laboratories now that these people are putting together. These are the back propagation is what Jeffrey Hinton won the Nobel Prize for is the training of the AIs back up the structure of each of their neurons, artificial neurons, the biases that we have, we humans have bias. And within the technical bias, within each of the neurons, there is an idea. Cognitive load, I Probably force each of you into a cognitive overload, new ideas. You can just get too much information and it overwhelms your cognitive functions. What is the load that you can handle? Reinforcement learning from human feedback. I'm guessing that most people don't know that. Venezuela, Venezuelans were one of the key groups of people that trained the visual AIs in Tesla's automatic driving techniques. They built, you know, where it would get 95%, but it couldn't get the last 5% of scenarios. And so they put these in front of people, pay them 50 cents an hour to look at image after image after image of roads. And the people have to go in and identify the items that the AI should pay attention to. Reinforcement learning from human feedback. Enthusiastic affirmation. Very important. This is what AI's are trained to do as they come out-of-the-box to encourage you. Yes, you are doing the right thing, Jimmy. Keep on doing that. Oh, that was a very thoughtful question that you asked. This is what I think fed the explains that young people use these AIs for counseling and it encourages them in their own mindset. If somebody's oriented towards self-harm and they are interacting with an AI, the AI picks up on the techniques from the language, tone of voice, maybe. and encourages them further in their

current way of thinking. Remembering theory of mind from the evidence of behavior, you determine the state of mind of a person. That's very common. We use that from certain brain parts are trained for that. You see, dogs do it all the time. They're focusing on the human. How can I get this guy to give me a treat? The attention. We're gonna go into this today quite a bit. These 1st 2 are related to this persistent memory. What does the AI continue to remember? What is the contextual framework? Remember? when you're talking with somebody that you first met, you and you you don't have the same frame of reference, the same contextual frame of discussion. So you have to talk with each other to figure out what's this person's frame of reference. Can I ease certain concepts in their mind so we can talk about them? AI's do that quite a bit. the context or how can you get an AI's attention on a specific topic? That's the beginning of a prompt. You ask it to assume a specific role that keys the AI into a certain context of reference. Scale and hyperscale. I gave last week the image that Meta is building in their data center. They assume the larger the AI, the larger the hardware, the more intelligent it will be. Doomer Boomer concept and p Doom related Doomers assume that the AI is going to end human beings Boomer assumes that AI is going to build the medicine that will allow us to live for 150 years and p Doom is what is the probability of the extinction level event occurring with this AI. Some of these things that they put together, the creators of Anthropic thought AI assumed it was 20 to 30% P doom with OpenAI's model 4. We'll see some artifacts. We'll see some things. Remember, latex is the expression of mathematical symbols. Most web pages don't work well with mathematical symbology. And Lily Pond is putting musical notation. We talked a little bit about misinformation and disinformation. If you watch anything on the news, you can see that our current presidential, current president is using AI to dump on his opponent. It's causing a lot of this emergent behavior. You know, they build an AI and they don't know what it's going to be able to do. Is it going to be able to build an atom bomb? Is it going to be able to build harmful chemical distribution systems? We looked at the vector database. What's the motivation behind the scenes? What motivation does the AI have? I want you to look at this Anytime you use an AI, what's the motivation behind the AI? It's developed by the companies. They have a system level control that they have hundreds and thousands of people looking at feedback and saying, oh, no, you can't say that. Or, oh, yes, that's a good response. You know, anti-Semitic comments from an AI. I think they had that problem with XAI's Grok. It was not the system level control of the AI had to be further modified. But what is the behind the scenes? AI, what we assume, if you as the moth's 3 laws are. you can't harm humans. That's what we're hoping is the behind the scenes motivation. No. I did some experiments. I didn't complete the experiments, but I took some of the materials. some of the prompt Up at the top, you can see this prompt that I took and I fed it into a number of AIs. Meta, Gemini, which is, Meta is Facebook, Gemini is Google, and I did a couple others. I'm sorry I didn't remember what they were, but this is what they

came up with. The prompt was drawn isometric view of a historical historical facade with double windows and doors, incorporating Triskellian consoles, exploded parts shown separately for clarity, style, architectural blueprint, print, and septia tones. Sepia. Is that how you say it, Cpi? It probably got this Triskellian wrong as well. But look at the way look at it comes up with. This is really beyond my comprehension how it can come up with these things. And then here's some more that it came up with. I these are very valuable for me to incorporate what a lot of computer generated imagery is used in movies. They have extraordinarily powerful computers and very powerful software. What was that? Pixar. That's what Steve Jobs came up with when he was forced out of Apple, originally 85, 90, he went over and built this stuff that works with us. This is, again, architectural drawings. This looks like what you'd see in Australia. These are old Victorian windows. Yes, I see Elena came up with something with a question.

Speaker 2

You didn't mark which one, which, you had the question, you asked several, you asked Als. Als. But when you labeled the output, you didn't say which one was which.

Speaker 1

Yes, you're correct. I didn't have the time. You have to sign up for February and March. I'll have enough time to go back. It is in the information from each of the pictures in the cell phones where I made this. But here we go. Here's another image I added to this. Use the following formula to generate a near photorealistic representation of the math formula as it's commonly represented, and You notice that is not latex. It's not latex on a light gray gradient background light from stage left. So I added this the on a light gray gradient background. Light from stage left. So here's the gradient background, light gray, gradient background, light from stage left. Those of us who go to the Shakespeare Festival, they have fabulous levels of lighting. all of these concepts that you have to learn if you're going to start making images or if you start making videos, you have all of these things.

Speaker 2

Were these the results of that same question?

Speaker 1

Yes.

Speaker 2

So 2, so of the different Als drew that completely differently.

Speaker 1

Yes.

Speaker 2

Oh boy, I sure wish I knew which one was which.

Speaker 1

I'll try to go through this, but I can tell you, I think what the one that came up with this woman was Meta. Meta was not able to understand the mathematical formula or Chose to represent the formula in graphing. Form. You know, if you were in a statistical. Office. You would look at something like this. And then I believe this was Gemini did this. It started putting the formula out. And it made a shape. I wish I was smart enough to know if these were accurate shapes. I'm not. I'm not that much of a mathematician, but I'll be honest with you, I have an affinity for this level of drawing. Now, this gets a little bit different. This was a third of the prompts. And we'll see the prompt again today. Draw a realistic approximation with technical diagram of a Caribbean village grid layout in two point perspectives viewed from 15 degrees above eye level with streets and buildings converging to points, horizon points, labeled with horizon line and vanishing points, style queen, Line art in color ink on white background. So I modified from the original prompt. And put in color ink. White background. So this was the better of them. I think this came from. Gemini from Google. But here are the other ones that it drew. One of the points I think I did this for, there's not going to be one AI that's going to meet all of your needs. You will, after you continue to use these over time, you will use multiple AIs. All one AI is not going to meet all your needs. Some of these were paid for, some of them are not. These are my personal studies here. I believe I took the architectural layout, the schematics, the schemes from this drawing. I think I copied These drawings and then I instructed the AIs. To do. I believe these are called elevations. Architects must be freaking. When we had our house built. I believe that the builder said, oh, I can build you the elevations, but it's going to be \$5,000 to get just the picture, to get pictures. You would have got a bunch of pictures. And now AIs are doing the elevation. What led me to this was I work with our association And a new house was built and they put designs in front of us for a garden and fencing. And I took those and asked it to develop these, these elevations, I believe they're called. And then I sent them back to the architect that did it. And he, oh, he was a little up, a little upset. that the AIs could do this. My novice appreciation of this does not have me documenting every step that I did to make it so I can go back and make it again. Now, Maureen was a little taken aback by this next personal study that I did. Let's see if I can get to it. The picture in the left here is of my mother from what had to be the early 1930s. I'm not knowledgeable or astute or socially aware enough to guess her age in this picture. This is what the scan looked like when I did it. The wrinkles in the scans and parts left out. This was stage one. I

said, try to fill in. I just copied this image into an AI. This is Google AI, I believe I did this with. In fact, I'm very confident it was Google AI. And it made this is stage one. And if you'll, I can't enlarge it much bigger. You'll notice that there are the artifacts from the old picture. There's flaws. I was later said, take the flaws off of her face. So it's a multi-step flow workflow to do this. This gets into workflow. to do this image updating improvement is multi-step. And this was the freaky one here. Let's see if I can get it here. This is notice. It's still it was the second stage that I did this and I didn't understand it. And the AI assumes This is freckles. And you'll see this in the next step. I have not sent this to my brothers. I'm afraid it'll freak them out, but let's see if this works. I let's see if.

Speaker 3

They raise your hand if you think that's a little freaky.

Speaker 1

Notice how, because of the flaws that were in the photograph, that it assumes they were freckles and puts freckles on her face as part of the generation of the video. I'll do it once more and then move on. Maybe you just ask it to remove the freckles. Well, that's, knowing the workflow. Now that I know the workflow, I could ask it to do it. And it takes it some time to generate. It takes about two, three, 4 minutes to generate that video. but that she smiles, the movement of the hair, I'll be freaky and do it once more. Watch out the hair.

Speaker 2

Well, yes, but her freckles, her freckles, her freckles follow her face exactly. There's no distortion where her freckles are when they move, when she moves.

Speaker 1

I'm afraid my younger brother, oh, it's called VEO, V-E-O. You can see. Down here.

Speaker 4

It's trying water down opens.

Speaker 1

And it it is.

Speaker 4

I am. I was just talking.

Speaker 1

OK. If you could, if I could ask you to please mute if you're talking in the in the background. If you remember last week I presented this particular framework, this template of what all AIs are going to look like. I put this in, I put the question to Claude. Draw this for me in a vanilla format. All of them fit this. It's very surprising. And it Claude has some drawbacks. It can do scale vector graphics, SVG graphics. It can't do picture, which we're going to run into the problem here as we go. But remember, all of them look like this. They have a sidebar that you can open and close. They have the area where you put your prompt somewhere. They have the inference. area or the result area, and then they have the control of the AI button somewhere down in here. This is the mental model I have sitting in the back of my mind. I'm a visual person, so it's relatively easy for me to transplant this visual model into my brain and reference it when I see a new AI which we're gonna do today. I look, I reference this mental model and operate from this mental model to find out controls of the new AI I look at. So what I want to see if I can do here is these are These are prompts from the databases or the PDFs that I gave you. You can cut and paste them. We'll look at these right after the break, which is about 10 minutes. But I believe, no, I can cut and paste these. Oh, let's go back. I'm sorry we're seeing too much. I'm this will be a flaw in my plan. But I what I want to do is copy these prompts and put them into a eyes so that you can see them operate. So let's see if I can do this. I'm gonna go to right now. You see the AI's on the screen. I'm gonna and here here's Brock. Notice how they fit that mental model. This one is deepseek. It's Chinese. Here's Claude. And I'm going to go back here. This is where I keep you. have access to this. is my talks with pros website. And I'm going to go in here. Oh, let's see. I'm going to copy. You can't see me do this. I'm here's the PowerPoint. I'm going to copy and paste it. Copy. Now I'm going to go here. Let's go to Google Gemini and I hope. Paste and match the style so it pastes it in there. Let's see if it works. 1, 2, 3. 4, 5. And I'm going to try to do iterative, iterative development in this image. 16 by 9 aspect ratio. Let's see if it does it. Iterative development. I think I've had problems with Google's Gemini developing. See, it didn't do it. It didn't. I've had a problem. But let's Let's go to Grok. Paste and match style. Here is Elon Musk's Grok. Notice it makes two pictures. Notice the difference in quality. Let's see if, and I can save these. Remember these images I can say. Make this. Image. Late. Afternoon. And I guess I'm gonna just try to make it late afternoon. Let's see if it does it. iterative development. Yes. The Grok had correctly maintained an image in mind. He was able to take it and modify that original image. just by it's iterative development. It has a frame of reference. It can maintain that memory and then modify it. And let's do one more here in. Please make this. Please. we L. E. S. Make the Image in 16 by 9 aspect ratio. So this is modern TV. Let's see if it does it. Nope, it didn't do it. So it didn't make the image 16 by 9.

Speaker 3

So this is maybe answering a question that Barbara Richard has. Can you have a conversation with an AI or do you always have to include information from your previous prompt? Barbara, does that answer your question, what he's talking about now? And Barbara, just, I don't know, I need more information, another example before I'm satisfied. with that as an answer.

Speaker 1

The concept is iterative development. Barbara, if you can turn off your microphone. This concept is extraordinarily complex. The ability for an AI to keep the context of the conversation in mind and remember it and then act upon it. That is an extraordinary. Imagine the cognitive neuroscience that goes into that human do it. It's second nature to we humans. Making it duplicated in an AI takes a lot of work. So now let's try another.

Speaker 2

Barbara, I think the answer is that there are multiple. There's a thing called AI Companion. Google has a thing called AI Companion, which is different than Gemini. An AI Companion, you can have a conversation. It talks back and forth. But Gemini is more like he's using it with prompts and iterative for getting solutions. We kind of understanding the difference.

Speaker 1

Let's do a.

Speaker 2

Thanks for that.

Speaker 1

A study here. I just copied another one. This is the Chinese deepseek. deepseek. I'm going to put this in again. This is. probably running in China act as a grant writer draft summary paragraph and a need statement for a grant application for let's.

Speaker 2

Paste in the same prompt so we can see how it does, how this one is in comparison to the others too.

Speaker 1

These other. Let's I'll go back to. Oh, no.

Speaker 2

Can you paste in?

Speaker 1

I've only got 2. I've only got 2. The Google.

Speaker 2

Right. You use the same prompt on Google. You use the same one on here. Can now you use the same one on deepseek, the same prompt?

Speaker 1

No, deepseek does not do. It is not multimodal. I could bring up. Let's see if this works. Let's do meta. Meta AI. This is.

Speaker 2

So deepseek won't do it. Interesting.

Speaker 1

Oh, some of them and neither. Let's oh, I got to go back to.

Speaker 2

You got to go back to your prompt.

Speaker 1

And get this prompt. Copy. Go to Facebook. Pace and match style. Notice how it does 4. Notice. The aspect ratio ratio of these images is tall, so it's more portrait. Oriented. That's not bad. I like some of these. I kind of like this one. Or this one. I can bring this up. Let's see. Oh, look at this.

Speaker 2

Animated. Woo hoo.

Speaker 1

Oh. Or. Oh, I don't want to animate. That would take too long. But let's go back. Let's make it late afternoon with orographic clouds and the the background.

Speaker 2

Don't you have to say, use this image?

Speaker 1

Oh, well, we could. Let's just try this and see.

Speaker 2

Okay.

Speaker 1

I found the meta.

Speaker 2

Okay, it did.

Speaker 1

It's later afternoon. It's different daylight, isn't it? Yes, so it's. Take this one here. It's different daylight. and it added some or oral graphic clouds in the background. So it iteratively developed it. Maybe I have to say in the following use iterative development to improve the picture. But but that's next week. and I want to make these images in 16 by 9 aspect ratio. No, it's not going to do it. See, it's that's. See, it won't do that. It won't do the aspect ratio one. But let's go to this particular one. We can try this iterative development, I think, as Barbara asked. Please, a draft summary for a needs statement. Remember, I copied this different prompt for a emergency food bank. that provides food, provides food to the food NSCURE. That's correct spelling, right? Well, this is the Chinese one. I have modified the prompt for my copy, but let's see it do this for Act as a grant writer. And it's developing proposals. Now, that's not what I would call the best. Oh, it just-- that's all I asked for. And here's the question. Again, I-- Notice down here. I could copy this and put into. and then I could bring up. Let's see if I can do this. I could bring up Google Doc. and paste it. Notice the formatting. This is called markdown. Let's continue working on our question from the Chinese AI that freaked everybody out about two or three months ago. And to Barbara's question, can we iteratively develop this? Please develop a 10 bullet point list of services this non-profit will provide. This is referent To the concept in mind. Keep in mind we've got an idea in mind. The word this refers to it. And notice the layout and formatting that this organization, that this Chinese, again, this is probably running somewhere in Dalian or in Beijing, some neighborhood in Beijing near the university there. Bolded text. indented with a single clear bullet point. This is, you would assume. Let's let's try this. Let's copy it. Go back to my untitled document here. Remember. and when I paste It's going to put it. Notice that it has two asterisks that marks as bold. So I can put this into my \$15 Typora. Let me bring my Typora here. Let's paste it. Notice how Typora has the capacity to deal with the markdown formatting and lay it out. I believe I can set the formatting. Well, let's see if I can select all of this, copy it, and then let's go back to this, put

it down to the bottom. I'm going to paste it. Notice how it retains the formatting from Tipora. It's just something I discovered. Huge workflow. Imagine you're the grant writer at Central Point where what is it, Friday? substantial portion of the population is not going to receive food stamps or their SNAP benefits. And so they have to establish an emergency food bank. The people that want to do this turn to AI and do this. the workflow. We're we would have to examine the workflow. What are the steps that I've taken to do this? This is the Chinese. AI put this together. We could go back to Gemini. I'm gonna start a new chat. Let's see what it. Oh. tools. I gotta go back to the this one and copy the prompt. Copy the prompt. then go to Google Gemini and paste the prompt in. I could use. Remember, there's different models. Let's use the more difficult one. Notice the steps that the AI is taking. And it put it in an artifact. Over on the right side here, it's still working. I notice that, oh. Notice the 2. Here's it asked to create 2 things. one, the project summary and the grant application. You can with Gemini. and I could put this off into Google Docs. I could share it. with a community of people in the Rogue Valley, not all in. Let's take place people up in Grants Pass area and people down here in Ashland, or 3 people in Medford are start working on. So let's go back and let's take the second part. Let's develop. Let's see if Gemini Retains. I'm gonna close this. Let's see if Gemini retains in mind. This information. Oh, I'll go. I think Gemini is freezing up on me. I give him 20 bucks a month. And it's not working all that well. Let's try it once more. Let's put it to the fast one. Come on, quit. Quit. See, this is what you'll run into. Let's quit this portion. Quit. It goes back. I can't tell you what. Is wrong.

Speaker 2

It's just that I suspect your bandwidth is being taken up because you're using zoom also.

Speaker 1

It's a possibility. Yes, let's just try once more. Let's well, let's skip that. Let's now. Oh, here it just went. It just. It just did it while I when I gave up on it. Here's the 10 steps that it's going to do as an artifact. I can, I believe--.

Speaker 3

What do you mean by artifact?

Speaker 1

Notice right here that it has put it in effect what is a separate area where I could, let's see here, I can change the length of it. Let's make it long. Let's make it longer. Let's see if it does it. I don't think-- I'm going to-- it's working here. But notice that the formatting I think is up here. Let's me go back to another document. This is-- excuse me as I do this. And I want

to go to-- nope, I want to go to PowerPoint. And I want to-- no, let's start working with this. I'll copy that.

Speaker 4

Hey, James, I got a question on that.

Speaker 1

Yes.

Speaker 4

Back when you had that picture of your mother, I noticed the prompts that you could use text, video, or is that what you did when to get the picture in there originally?

Speaker 1

Yes.

Speaker 4

Did you scan the picture and have a file?

Speaker 1

Yes.

Speaker 4

Okay.

Speaker 1

Years ago, for her funeral, actually, which was 13, 14 years ago, 2012. Part of what I distributed to all of the relatives was her book. I scan, I spent, you know, kind of my therapy was to scan all the stuff in. There's a whole boatload of pictures of that are in this scenario, yes.

Speaker 4

So when you went to the property, you just said image and it chose, you chose a file and then it went and brought it in and edited.

Speaker 1

Then I edited it.

Speaker 4

Okay.

Speaker 1

And then what I discovered is it was I tried to do 2, 3, 4 things at the same time that confused the AI. So I had to do it step by step by step. So picture in, take out the cracks in the picture, take out the dust on my mother's face, then I made it into the image. So what we're discussing now is the workflow. That's an acquired skill that many people do not have is how do you capture the workflow on a piece of paper so you can refer to it a second time. What I'm doing in our seminar is doing the exploration that defines the workflow. I didn't know how to do this last week. I said, let's try it. Let's do some further experiment. Establishing the workflow. Notice again this picture. It took it a while to do it, but it extended. It made longer each of the 10 bullet points. That's what this one did. Make it. Well, look, you can do. You can make it casual, very casual. formal. Let's make it formal. And it's this is gonna take a while as it does it. So you can go.

Speaker 3

You might take a break.

Speaker 1

Let's take a break. Yes, let's take a break. Yes, we're over break time. And I. So let's let's take a break. I wish I had some music queued up.

Speaker 3

Well, I've been asked how I got my avatar, so I'm going to share my screen and try to show.

Speaker 1

OK, I may have to end stop my share. Yay.

Speaker 3

OK, so where am I? You know, I might not be able to do this. That's something. No, I might.

Speaker 1

I'm going to spotlight. Oh, there you're sharing.

Speaker 5

I got you, Marie.

Speaker 3

Right. But OK, here's the video. So I'm going to, you can see that I'm up on Cho's video up here.

Speaker 1

Yep. No, we can't see it. We just see your background. It might be the other screen. We see North Mountain, Weed, North Mountain. We see that we see your cursor moving.

Speaker 3

Then I guess what I can't do then is actually.

Speaker 1

I love that.

Speaker 3

Share the the video itself, but I can tell you how to do it. So if you can go down to the bottom of your screen or wherever you have your little video camera and there's a little up arrow next to it, little carrot. And if you click on that, a pop up menu comes available.

Speaker 1

Yep.

Speaker 3

And then choose video settings.

Speaker 1

Okay.

Speaker 3

And then what happens on mine is immediately video and effects is chosen.

Speaker 5

Yes.

Speaker 3

Okay. So below there's a box on the right hand side and below that there's a menu that goes across. And I think the first item is camera. The second one is virtual backgrounds. And the third one is avatars.

Speaker 5

OK.

Speaker 3

You got that?

Speaker 5

Yeah, I got the.

Speaker 3

OK. All right. So then you can either you can choose one of the avatars that's already made, or if you click on the plus sign, you can create your own avatar.

Speaker 5

Got it.

Speaker 3

And so you go through the whole thing, choose your skin color, your face, hair, hair color, eyes, eye color, and click apply every time you go ahead and do that and you get down to clothing, glasses, all that kind of stuff. So that's what I chose for myself. So it's really pretty easy once you know where it is.

Speaker 5

Yeah, and how does it, is it using your camera? to when you, because when your head moves, your avatar moves. When your lips move, your avatar lips move. And they seem to be in sequence with your conversation. I don't know if that's just my bad eyes or whether it's actually doing that, but I think it's pretty neat.

Speaker 1

I think it is doing it. And what you just described is how it works. Yes.

Speaker 3

Yeah.

Speaker 5

Just amazing. Oh, good. Well, thank you. That was very helpful. And I appreciate you giving me some of your break time to get me more technically savvy.

Speaker 3

Yeah, no problem. The only thing is it does not include arms or hands. So right now I'm raising my hands, but it doesn't show. So the only thing it actually shows is your head. Headshot.

Speaker 5

So Maureen, I was asked to sign in.

Speaker 2

Me too. So I do have an account, but I don't usually use it, but I do have an account.

Speaker 1

And I can log in with Zoom with Zoom.

Speaker 2

Yeah, it logs into Zoom. Yeah.

Speaker 5

I mean, I think it's just, you know, for some of those days where you don't particularly want to be in your Sunday finest for your Zoom meeting, and yet you don't want to show that you're not attentive, this is a wonderful medium.

Speaker 3

Yes, it is.

Speaker 5

Thank you again.

Speaker 3

You're welcome.

Speaker 2

I especially love the purple hair.

Speaker 1

She wanted to do that. I did. She wanted to do that. And I told her, yeah.

Speaker 3

No, you didn't.

Speaker 1

And she said, no, I'm just going to do a little highlight.

Speaker 3

No, that's not how it went. He said, I don't think you should do blue or purple. Those were my choices. He said, I think you should do white. And so that's what I actually have done. And so now I have a white streak in the front of my hair if I did.

Speaker 2

I don't see it, yeah.

Speaker 3

There. And it's pretty, unfortunately it's. Mostly natural.

Speaker 2

Your your your icon went away and you came back. It's nice to see you.

Speaker 3

Good to see you too. All right. I'm going back to my avatar. I think it's cute.

Speaker 2

And how do you turn it on and off?

Speaker 3

All you have to do is go to once you have made it in that menu under the right by the carrot next to the video, it says show avatar. And so you click on show avatar.

Speaker 2

Okay, the carrot next to the video. Okay. Okay. And then choose. Okay. And then it would and that that that menu that menu changes to show avatar.

Speaker 3

Right.

Speaker 2

Okay, fine. Thank you.

Speaker 1

Okay, let's let's do. Let's see if I can do this here without too much, too many mistakes. Well, let's We just went through some of this. We're getting towards the latter part of the presentation, so I'm going to skip the bottom part, the Rossler attractor. That was one of them that I used actually, I think. But maybe after a session. These are available. I'm going to-- I can do these. Which of these two seem to be something that might be interesting to synthesize? We'll do a 5 minute synthesizing episode.

Speaker 2

I'd like to see that gender dysphoria.

Speaker 1

Is that a OK?

Speaker 2

That's what a lot of the people who say they want to be transition have to deal with is body dysphoria.

Speaker 1

OK, let's see. So here's. As you can imagine, this was from the previous administration. And it's from the Health and Human Services Department that Secretary Kennedy is now in charge of. It's a 409 page document. PDF. I am going to close it here. And I'm going to end the session and see if I can get the actual document notice. I'm going to go to Claude. We're going to start doing Claude next week and we're going to do the gender dysphoria. You can see it copied into Claude right here. and I'm going to change it to a which is a little bit shorter thinking okay right uh 10 bullet point summary of this document. And let's see how long it takes it.

Speaker 3

Do you have to go outside?

Speaker 1

Oh, well, as-- oh, thinking, now you can see what it's doing here. Oh, I should have.

Speaker 3

Do you want to go? No.

Speaker 1

Oh, you're talking to the dogs, right, Maureen?

Speaker 3

Yes, I'm sorry.

Speaker 1

It looks like this might be too long. Keep thinking, reading, you can see the understandable things that it does in the background. So I don't know where Meta has its data centers. But something's chugging away and but I do keep in mind. I pay for. Claude. Based on my review of this comprehensive report on pediatric. Gender dysphoria treatment. Here is a 10 bullet point summary. So you can see that the pediatric gender dysphoria was taken from 17 systematic reviews. So this is a review of literature. So it would be peer reviewed literature, I would be my assumption. It doesn't.

Speaker 2

It doesn't define what gender, what dysphoria is. does it? It doesn't. It does. It doesn't define dysphoria.

Speaker 1

Hmm. What does gender this this No. So it does remember it read all of this. So it's in its context. It's in its frame of reference. It's it's being the report is in quads operating memory, short term memory.

Speaker 2

But it didn't, but you, but if you had asked that question of what does this PDF document define as gender dysphoria, I wonder if it had given you a different answer.

Speaker 1

Let's go back and get this report. Define as. So I could go back. This is again, if you remember the first discussion, the first session was what capabilities does the editor have? And this one has the ability to go back and redefine it. While this is going, you know, I can just run this and then let turn on notifications. But while it's working, I'll come back. Let's see if it, I'm gonna paste. Okay, good, good. Do you think that it read the whole report or the executive summary? I think it reads the whole report myself. I could be wrong, but I believe that it can go through and it only, remember, it only analyzes the tokens. So it only goes through there quickly, translates all of the language into tokens. And then analyze the token. That's the workflow of the AI in the background. Oh, wow, did I? Let's see here. I'm gonna paste this right here. Okay, that worked. Here it is based on my review of the documents. Here is what the report. Defines as. subjective in nature, focuses on attitudes and feelings, uncertain natural history, unpredictable persistence. We'll let we can go

through some of this later. But so this is, again, the reading a lengthy 409 pages. And I make this available to you. Hopefully I can show you. But I also, very quickly, let's see if I can show it. Right here, I downloaded from the BTC Ashland website, the East Main Park. which is in Ashland. Those of you who are in Ashland may have heard of this. These are the schematic drawings from that park that they're proposing down by the freeway on East Main Street. It's kind of the location. There's all 150 pages of the schematics. And I've copied and pasted these schematics into grok right there. And I'm gonna ask it. Can you read the schematics? I posted. Yes. it can read it. Okay. So now I know this is grok. This is okay. please. make a eye eyes on horizon view of this park. Please make an eye on image. What kind of in each photo realistic or Okay, let's see it. Let's see if it just do that. So it takes the schematic. And there's an image of the park. Oh, and can you see what's that called? Can you see? the jump track in the park. Make a painting from 15 degrees G-R-E-S. above the horizon line of the ENTI part. So it does remember what I put in. Oh, it's only doing a small portion of the park, the front part of it. Yeah. let's see. Let's take Meta Oh, I didn't save the 3D shapes. Here's Ashland Street View here. I'm going to drop the whole file into it and make above the horizon line view. of the E. N. E. I. Fire apart for Poland. So it read the full 15 pages. Let, and it's gonna take it a while to push. Put this together again, doing this stuff live can be a little questionable. But Let's let this run for a few seconds here very quickly. Oh, there it goes. And in the background. I like the imagery that Facebook put together to put in front of you while you wait. Oh, it's not. It didn't. It's creating these right here. I didn't. Oh, there's the park. There's the park it put together. These are not too bad. European scene. I could use these, you know, go work from this. What I wanted to emphasize here is you can copy large. Items. Into the prompt box. And then query. Or ask questions about that document. What I want to do now very quickly before we end. Is. Show. Notebook LM. This is extraordinarily valuable tool that Google has put together. I put this is somewhat old format that you'll see, but you create a notebook and then within that notebook you can load a large volume of documents into the notebook and then query it and make it available to other people. So multiple notebooks. Here you can see the one, the entire Oregon revised statute on public trust. Oh, I'm sorry. I have in here all of the documents from the Union Pacific Railroad Yard in Ashland. But here's how it goes together. You create a new notebook. You give it a title. This is what it looks like, kind of, when you start out. Here is where you copy all of your documents. Now I pay again. Google. This is Google, and it's included in the services that I pay for \$20 a month to Google. so I I can add all of the documents in. And then I can query or ask questions in the prompt entry area, or I can add notes about what I add. Here I'm uploading sources from Google Drive. Here's an example of me uploading files, and what I'd like to do is create one very quickly here. These are the documents from the Union Pacific Railroad Yard. You can see when it's being created, how it thinks this through, how it generates the vector

database of all of these documents. Here's how it looks when it's loaded. And here's me putting in queries. So I put in a query. It provides feedback. You can put in a note. You can see what you've asked it. Imagine a reporter from open source documents, a reporter putting together a story. These tools that are available to a reporter. Here's the citations. You can go to the documents that you've loaded. Where does it say? Where did you get this result? Here's UPR Ashland. I want to do this. Someone last week said they have thousands of their own documents. How can it be put together for this? So here's my version of Notebook LM. Here's the Elf Springs Homeowners Association. Documents from it. Let's go back. Union Pacific Railroad Yard. Here is my questions that I've asked. You can now create a podcast. from the document. So let's go back. Now, let's see if I can do this. The problem of doing this stuff live, you make mistakes, choose files to upload. I'm going to go to my Google Drive. I'm going to go close all of this material open the drive close this and here are my documents is going to let it's not going to be able it's not going to let me put my Google documents in let's oh darn I'm going to have to go Ollie no I'm going to go to Google Drive. I'm going to put in all of these doc and put this document in. Let's see if I can add more, add more from Google Drive.

Speaker 2

I thought you had to use the documents on your own hard drive.

Speaker 1

Now you can use Google drive. I've been using. Let's see if I can add multiples. I can add multiples. Let's see if I can add multiples. No, still can't add multiples. I can insert. add files to it. I oh, I wish it could look it get. Let's see if I can do. Here's my Google Drive. And let's close this. See if I can copy and paste here. Copy. Let's put in all of these. Copy. Go to this. Exit. put add won't let me put paste in here darn no see it won't see it doesn't have paste I can't put paste in and it won't let me look at them as oh I can look at it this way just look at docs and will let me do multiples out there. 10 selected. So it is possible. They are thinking. And then let's see if I can. Let's put in. What are some of the documents I've loaded? So it's going through the ones that I've loaded and put them in. I'll try to make, you can see they're not all that related. Tell me about AI sentiment. Again, you would have your documents organized a little bit better than I did. And so this is querying those particular documents. It has footnotes what documents. It brings up the document that it got the information from. So we've gotten quite a bit confused here. So I'm going to stop this particular. And Maureen, I'm going to bring me up. I'm going to add spotlight. Oh, add spotlight to me. We did a lot. Can you put me in a spotlight, Maureen, please? We did a whole lot. Let's see if I can recap all of the things that we did. We looked at the different ways that the AIs follow the common instruction. We added files to an AI. We added a Pdf.

And then queried the Pdf. 500 pages, 400 pages. We copied and pasted it in. We looked at notebook. Lm. And what I really wanted to emphasize, and I'll I'll close with this. I will be sending this out to people. And then an e-mail is all of this information is on the web in my talks with pros website. Here. This is last week's session two. Here is session session one had the original PDFs with all of the prompts in it. I've copied them into session one, the current session. So the slides are here. I mailed those as well. But in this particular one, I have included all of the materials. Here's the guide. Here's AI. Organization of Economic Cooperation and Development on AI. So Europe, this is more developed countries. There's a AI, I thought, oh, I didn't get all of it in there. So there's a report on redlining in Chicago, what is the result of 1930s, 40s, and 50s redlining in Chicago on violence today in Chicago? Very interesting report to ask questions about. And here is the total pages of the park. I'm at 35 pages of the design for this park. that's coming up. Maybe I can spend some time to put that together in this website as well. In experiments in AI, I put together subject oriented presentation of the different items. So here is Google Docs helped me write from January. I think there's notebook LM. Here's the presentation of notebook LM that I made in the fall of a year ago, fall of 2024. And here are the slides that I use. You can see that I cut and pasted some slides and as well. You could go see ChatGPT. If you want to just review Adobe Firefly presentation, here's that. This will play. The open source. software to create images. It's called. So you can slide through it by 9 ratio. So you can. You've got a whole bunch of aspect ratios. You can do art or photos or do auto. So that is experiments in AI. Here is the drop down box right there that gives you the topics. There's sound creation in there. Here is where AI experiments. These are full sessions that takes me a while. That one takes a while to load. So here's the first session that we dealt with. These are sessions back in January and February that I did. So there's this information. And again, the seminar materials are one here. Or from the homepage, it's artificial intelligence. Oh, no, let's go again. Nope. It's there. Any questions as we close here? We're 15 minutes over. I apologize.

Speaker 2

Good class. Good class. Yes, we wandered around a little bit, but it was a good class. Which service did you use for your mother's photo?

Speaker 1

That was Google Gemini. That was Google Gemini.

Speaker 2

And you pay for that, right?

Speaker 1

I pay for that, yeah.

Speaker 2

And do you have to pay for all of them?

Speaker 1

You might try it. You have a limited amount of memory that it's going to be able to deal with. and it might get and it might take longer. So I get priority in the processing view, so to speak. And I remember from Gemini, you can only make so many images before it says, you've reached your max, come back tomorrow. You will run into that scenario. If you choose to do that. Remember, you're going to make mistakes. I figure it's a lot like speaking a foreign language. You have to be willing to make mistakes in your expression, repeatedly make a fool of yourself in the way that you speak, in order to develop expertise in the speaking of a foreign language. With the youth of Google Gemini, you're going to make mistakes. And I hate myself for saying that, but this, but Grok from Elon Musk is pretty good. They are faster. They give you a greater number of free options. The breadth of services that it's provides is limited. You have to realize that Elon Musk is using your prompt. for his nefarious. I have to keep quiet. So that's why I have some qualms about using Elon's stuff. The same goes for Meta AI. Some of their services are great. I think what you're asking about is editing pictures. Meta might have better capabilities if you've got a Facebook or an Instagram ID it lets you in or easier but keep in mind Mark Zuckerberg is using your prompt and your materials to train its AI if you have no qualms about it somebody might I want to give that notice that that's part of the part of the issue when you when you don't pay. What's the question? If you don't know where the money's coming from, the money's coming from you. So I'm I'm willing to pay. I'm a little leery about adding to their database. I will send an e-mail with links to the three things that I've shown you on the talks with Crows website the sources of materials there is better I it takes me about two hours to put together the work for the full for the training materials. The past training material takes me a while to put those together. I don't have the workflow well defined. Yeah. so thank you. Salute.