Event Transcript

**Equitable AI: Designing for Inclusive Access**

Presented by Dr Jutta Treviranus and Cindy Li of the Inclusive Design Research Centre at OCAD U

Hosted by Windsor Hackforge

Friday, May 30th, 2025

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Windsor Hackforge: So my name is Lauren Hedges. I'm the managing director of Windsor Hackforge. We are a grassroots tech nonprofit.

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Windsor Hackforge: Located in Windsor, Ontario, so very southern tip, right across the water from Detroit.

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Windsor Hackforge: Hackforge has been around for about.

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Windsor Hackforge: 12. 0, it'll be 13 years this summer, so we've been around for 13 years.

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Windsor Hackforge: And we aim to create connections with through around and about technology. So we really focus on bringing together technologists.

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Windsor Hackforge: Of different disciplines, who are at different stages in their careers.

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Windsor Hackforge: Sometimes even just folks who are hobbyists. We post many, many events. Usually we get up to around 60 per year that are all completely free.

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Windsor Hackforge: And generally run by volunteers.

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Windsor Hackforge: The goal is to help somewhat democratize technical education. We find that folks are not able to.

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Windsor Hackforge: Get the full gamut of their of the.

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Windsor Hackforge: Technical world into their post-secondary education, because it moves a lot faster than

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Windsor Hackforge: Curriculums can move. So we like to help out with that.

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Kathy Elissat: Yeah.

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Windsor Hackforge: This week we're running an entire series a week long series.

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Windsor Hackforge: On accessibility.

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Kathy Elissat: He was so excited.

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Windsor Hackforge: This is all in.

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Windsor Hackforge: In recognition of national Accessibility Week. But a few more folks joining here that I'm gonna let in.

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Windsor Hackforge: So as we work through this today, um, I'm gonna ask that everyone keep themselves muted throughout the presentation. If you have questions.

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Kathy Elissat: If I'm walking the road, and there's a school, and I'm not seeing it.

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Kathy Elissat: People at the dog front tell me in another year or 2. So I ran into another breed.

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Windsor Hackforge: But you can put them in the chat. They'll be read out at an appropriate time.

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Kathy Elissat: Everyone.

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Windsor Hackforge: When we do get to like a full on question and answer session at that point we'll invite people to unmute themselves.

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Kathy Elissat: And he's like uh.

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Windsor Hackforge: Um in order to to ask their questions out loud. That is not going to be a problem at.

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Windsor Hackforge: All. So what what time are we at now? 11 0. 4. We'll give it another moment or 2 before we.

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Windsor Hackforge: Before we fully get started here. But thank you, everyone for joining. Normally. I would go through and do a round of introductions, but.

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Windsor Hackforge: We've got a good amount of content for today, and a lot of folks.

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Windsor Hackforge: Who are joining, so please feel free to introduce yourself.

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Windsor Hackforge: In the chat. We would love to know who you are, where you're joining from. If you're from a specific organization, feel free to do that.

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Windsor Hackforge: Whatever information you'd like to share about yourself, please feel free to put that in the chat.

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Windsor Hackforge: We'll be happy to hear from you.

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Windsor Hackforge: Okay, so with that.

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Windsor Hackforge: I am going to turn it over to Samur.

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Windsor Hackforge: Who is going to introduce our guest speaker for today. Samer is a wonderful part of the Hackforge community we 1st met a little over a year ago, now.

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Windsor Hackforge: Through some other. I think community activists. I think David was the one who really brought us together, and I'm so glad that he did.

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Windsor Hackforge: I tell a lot of people about your product. So please make sure to mention that to everyone I want to. I want to get the word out there about.

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Windsor Hackforge: The work that you do as well. So from here I'm going to pass it to you, Samr, and then you can kind of take it over. If you need anything, though I am here, let me know.

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Saamer Mansoor: Thank you so much, really appreciate it.

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Saamer Mansoor: Um, Lauren, you do phenomenal work in our community.

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Saamer Mansoor: We are very grateful for the.

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Saamer Mansoor: For everything that you do. I'm Salma Mansour. I'm the founder of. Be aware, the deaf assistant. We have tools that help the deaf and hard of hearing community.

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Saamer Mansoor: And uh.

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Saamer Mansoor: That be before I worked on. Be aware, I have been doing a lot of uh.

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Saamer Mansoor: Accessibility, consulting work in the digital space.

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Saamer Mansoor: And I got to work with a lot of people with.

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Saamer Mansoor: Different disabilities, and I have been so blessed that I've been able to do this work.

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Saamer Mansoor: That being said today, we have.

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Saamer Mansoor: Um some. We're incredibly fortunate to be joined by 2 of the leading voices in.

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Saamer Mansoor: In the field that we're speaking about today. So we have Dr. Yuderanus and Cindy Lee.

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Saamer Mansoor: They spend their careers pushing technology to be more inclusive, ethical, and human, centered. Dr.

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Saamer Mansoor: Trevoranus is the director.

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Saamer Mansoor: Of the Inclusive Design Research Center at Ocad University.

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Saamer Mansoor: And she is a global authority in digital inclusion. I can definitely say that.

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Saamer Mansoor: Uh! She's super well connected. She's played a.

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Saamer Mansoor: A very pivotal role in shaping international accessibility standards, and is currently leading Canada's effort.

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Saamer Mansoor: To create a national standard on.

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Saamer Mansoor: Accessible and equitable. AI.

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Saamer Mansoor: So the the standard that we talked about just yesterday.

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Saamer Mansoor: In our group review.

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Saamer Mansoor: And joining her is Cindy Lee. She's a senior inclusive developer at the inclusive Design Research Center as well.

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Saamer Mansoor: And she's incredibly experienced as well. For over a decade Cindy has been building tools.

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Saamer Mansoor: That center people with disabilities. So from accessible content management systems to AI systems.

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Saamer Mansoor: That help individuals communicate more effectively. She's also been working on mitigating bias in Llms something that we were trying to figure out yesterday.

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Saamer Mansoor: And she's trying to ensure that marginalized communities are not excluded by algorithmic decision making. So together, they'll walk us through.

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Saamer Mansoor: The promises and pitfalls of AI, and share highlights from the technical guide.

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Saamer Mansoor: And invite us uh.

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Saamer Mansoor: Into an open dialogue, and how we can build systems that reflect the full diversity of human experience. Please welcome in.

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Saamer Mansoor: Joining Dr. Trevernos and Cindy Lee.

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Jutta Treviranus: Thank you, and thank you. Samra and Lauren.

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Jutta Treviranus: It's a pleasure to be here and to speak on this really critical and timely topic. I'm.

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Jutta Treviranus: It's wonderful that you've actually reviewed the the standard. And hopefully, we can have a.

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Jutta Treviranus: Fairly productive conversation after this presentation. Um it I'm I invited Cindy to join me because she is the person that can bring a lot of the practical and specific information about how to.

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Jutta Treviranus: Support accessible and equitable AI from a developer perspective. But we'll also talk about.

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Jutta Treviranus: How you can help in terms of advocacy and policy.

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Jutta Treviranus: To begin with, for those of you that.

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Jutta Treviranus: A benefit from a visual description. I'm an older woman, older white woman, with.

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Jutta Treviranus: Gray, short hair and glasses.

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Jutta Treviranus: And I'm currently actually sitting in my daughter's house because the roofers were in my house. And so I'm I'm using a single screen, and I've had to do this kludgy thing of sharing only a portion of my screen, which is why.

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Jutta Treviranus: You saw my 1st slide right from the beginning, but I am with both my house and my daughter's house are in the traditional territories of the Mississaugas, of the Credit, the Haudenosaunee.

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Jutta Treviranus: The Ishma and the well here on Wendat. I am going to be showing.

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Jutta Treviranus: Slides, and there will be graphics. But I'll be sure to.

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Jutta Treviranus: Voice all the text, and to describe the graphics that I have in the in the slides, and I will give the slides as well to Lauren and Samar, so that you can share them with whoever wishes to have the slides.

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Jutta Treviranus: Um so.

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Jutta Treviranus: What I want to talk about is AI and disability, and the somewhat problematic, but also.

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Jutta Treviranus: A beneficial relationship between disability and AI. One of the things that we've known in our close to 40 years, or actually more than 40 years of working in this field.

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Jutta Treviranus: Is that any disruptive technology is felt. The extremes of any disruptive technology are felt by people with disabilities. If you have a disability, then you both feel the the.

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Jutta Treviranus: Greatest risks, but also the greatest.

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Jutta Treviranus: Opportunities, and this is especially the case with AI. I'll tell you 2 scenarios. The one is AI.

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Jutta Treviranus: Offers the sublime and life-changing opportunities. One example of this is, I just traveled with a friend of mine who's blind to Vienna, and I've traveled with her quite a bit before, and usually I'm the describer I have to.

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Jutta Treviranus: Share with her the experiences and explain everything. And I'm not actually a very good travel.

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Jutta Treviranus: I guess tourist.

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Jutta Treviranus: Describer, etcetera. But I try my best, and this time the situation was completely switched. Her smart glasses gave an almost poetic description of our surroundings, including historic facts, reading and translating the text that neither of us could understand, and helping us find landmarks. We wanted to explore.

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Jutta Treviranus: So the the roles were were completely switched. And this is the case with many of the miraculous things that AI is doing when people are attempting to address barriers.

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Jutta Treviranus: And translate the world, translate audio, translate.

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Jutta Treviranus: Visual information. And Samara, you've also, I understand, been working in in this area as well and hopefully, we can explore some more of that towards the end of the discussion period.

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Jutta Treviranus: The the other side of AI is the cruelty and and inhumane treatment of people with disabilities that is happening as a result.

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Jutta Treviranus: Of AI, and how we've encountered this is by monitoring the harm and incident databases that have been springing up around the globe. That track. What are some of the things that are happening.

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Jutta Treviranus: With people? Or what are some of the harms that AI is doing? And.

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Jutta Treviranus: Unfortunately, there people with disabilities face a heart-wrenching and depressingly disproportionate set of harms. Examples include, but are not.

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Jutta Treviranus: Complete things, like parents with disabilities falsely flagged, as unfit, and losing custody of their children. False, positive tax audits.

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Jutta Treviranus: False, positive security, flagging at various security.

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Jutta Treviranus: Of checkpoints, including airports excluded from optima filtering in employment and education, biased credit and asset, rating unfairly denied mortgages and loans.

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Jutta Treviranus: Unfairly high insurance rates, deprioritization of relevant information in media and the news, and even iatrogenic death and illness or death and illness.

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Jutta Treviranus: Due to the treatment rather than the illness, because medical calculators are being used, and insurances are denying payment of anything but what the AI determines.

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Jutta Treviranus: And then, worst of all, as AI is being used in in battle, people with disabilities tend to be collateral damage more than anyone else, and.

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Jutta Treviranus: The reason for this um and what the is I'll explain later. But.

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Jutta Treviranus: Unfortunately at its most benign, and we'll talk about some of the benign effects, but also some of the most more extreme effects. AI can be a highly seductive form of digital Eugenics.

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Jutta Treviranus: AI in its present form is the ultimate adage of Be careful what you wish for.

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Jutta Treviranus: It's poised to make everything worse for people who are struggling the most and everything better for people who are already doing well, even among people with disabilities.

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Jutta Treviranus: Um AI at its most basic is a statistical reasoning machine feeding on available data.

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Jutta Treviranus: And.

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Jutta Treviranus: It can be seen as a power tool, like moving from a hammer and chisel to a powerful motor. It can do the things that we've done before.

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Jutta Treviranus: But more accurately, consistently, and efficiently.

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Jutta Treviranus: It is amazing at mechanizing, accelerating, amplifying, and automating existing patterns.

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Jutta Treviranus: It can statistically find or produce the typical popular, normative, predictable, and statistically average patterns. And most people became aware of AI with the emergence of Chat Gpt. But AI, of course, has been around and deployed for decades.

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Jutta Treviranus: When people feel daunted by the complexity of AI.

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Jutta Treviranus: I like to emphasize that people still control AI and characterize it as 3 generations of how people command AI.

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Jutta Treviranus: In the 1st generation, which is what is deployed in robotics, we said, here are the rules. Follow them literally and accurately.

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Jutta Treviranus: And maybe during the discussion period, you can help tell us stories of television comedies that you watched where AI robotics did things far too literally like throwing out the husband when the instruction was to keep the house clean. The second generation of AI was.

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Jutta Treviranus: We said, here is available data. Use statistical reasoning to optimize the selected metrics.

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Jutta Treviranus: And this is a form of AI that is deployed pervasively. And we'll talk about all of the places where it is making decisions for us, and where humans are no longer making those decisions. And then the 3rd generation, which is.

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Jutta Treviranus: Chat. Gpt and Gen. AI were saying, here's all the data we have. You figure it out and make new connections and determine weights based on past relationships and possible combinations.

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Jutta Treviranus: So we are slowly seeding more and more control to AI.

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Jutta Treviranus: And, as I mentioned, most people became concerned and aware of AI when it reached the 3rd generation, I'm actually more concerned about the pervasive deployment of that second generation. AI and all our critical decisions. To understand my concern, you need to understand something about disability and data.

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Jutta Treviranus: Over the 44 years that I've been in the field, I've been collecting data I've been asking everyone I encounter, or almost everyone I encounter, and some of you may have been asked the same question, what do you need to thrive and fully participate in society?

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Jutta Treviranus: And because this data set is so diverse and multifaceted, the only way I can plot this is using what is called a high dimensional, multivariate, scatterplot.

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Jutta Treviranus: Um, and when I.

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Jutta Treviranus: Plot it this way. The needs of any given population looks like a starburst, and I've dubbed this the human starburst. It's a normal distribution many bell curves plotted together.

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Jutta Treviranus: Or the pattern that Pareto noticed when he developed the 80 20 rule like a normal distribution, 80% of the needs are clustered in the middle, 20% of the space.

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Jutta Treviranus: And the remaining 20% are distributed in the periphery. In the remaining 80% of the space.

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Jutta Treviranus: And what you'll note is that the data points in the middle are close together, meaning they're more alike.

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Jutta Treviranus: And the data points at the periphery are further apart, meaning they're more different from each other. And you can probably guess where all of the needs related to disability are.

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Jutta Treviranus: They're out at that jagged edge.

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Jutta Treviranus: And because of economies of scale and conventions like the 80 20 rule that say to ignore the difficult 20% that take 80% of the effort. Almost anything that is designed works for that middle 80.

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Jutta Treviranus: Percent is difficult to use as you deviate from the middle and doesn't work for you. If you're out at the jagged edge and the design of the AI ecosystem is no different. Any statistically determined prediction is highly accurate in the middle, inaccurate as you move from the middle and wrong as you get to the edge. And this predates. AI. It's.

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Jutta Treviranus: It is the case for almost anything that is statistically determined.

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Jutta Treviranus: And AI, as I said, is simply amplifying, automating, and accelerating a pattern that already ripples through every aspect of our lives, creating greater and greater disparity.

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Jutta Treviranus: And when we think about the crises that our global society is in, currently a lot of it is due to that disparity, the inequalities that exist, and the resulting difficulty in dealing with other crises.

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Jutta Treviranus: So this pattern exists within our designs, who our designs are a fit for, or a misfit for.

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Jutta Treviranus: The products that make it to market. The knowledge we recognize as scientific evidence based on quantified statistical power. Much of that knowledge applies to the majority, but does not.

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Jutta Treviranus: Apply to the minorities at the edge. Our education, which pushes towards standardized learners, our systems of employment, which attempt to create replaceable workers.

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Jutta Treviranus: And our systems of governance. For in defending democracy we've often reduced the ideal democracy to one person, one vote and majority rules without attention to human rights, which means that the critical needs of the marginalized minorities will be outweighed by the trivial needs of the majority.

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Jutta Treviranus: And this is the case, of course, in any majority rules decision making.

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Jutta Treviranus: Who are the winners and who are the losers. The losers tend to be those who have needs out at the periphery.

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Jutta Treviranus: And what we failed to take into account is that the only thing that is certain actually, the only thing that can really be predicted is death and disability. We'll all, at some point in our life experience disability ourselves or with someone we love. We will all have needs out at that jagged edge.

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Jutta Treviranus: Which means that if we consider the hugely diverse margins, we leave room for change and growth when the unexpected happens. And, believe me, there's going to be a lot of unexpected things that have happened. You can all probably name some.

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Jutta Treviranus: In the past few years.

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Jutta Treviranus: And innovation is actually found at that outer edge, not the complacent middle. The people at the edge are the 1st to detect the weak signals of crises to come, because, of course, disparity and exclusion are vicious cycles. If you are experiencing one form of exclusion, you're likely.

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Jutta Treviranus: To experience another, and so you're likely to be the 1st to be vulnerable to any of the cracks.

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Jutta Treviranus: Whether it's in the ux design or in the.

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Jutta Treviranus: The digital ecosystem that are likely to occur. So the knowledge space that we need to to know about and that we need to attend to. Is not that complacent, middle.

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Jutta Treviranus: But the 80% of the unexplored, unexplored knowledge space.

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Jutta Treviranus: Um. The extreme opportunities of AI frequently mean that people with disabilities are the poster child of AI. We're used to justify the risks.

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Jutta Treviranus: And we a common theme voiced by leading developers again. Now um.

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Jutta Treviranus: Even though there was that push for a.

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Jutta Treviranus: Pause on a 6 month pause on AI, related to the geopolitical and economic AI imperative is justice to break things, to make mistakes, to push forward.

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Jutta Treviranus: And unfortunately, even in Canada. Now we have a minister of AI, where Canada is sort of hooking our hopes on.

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Jutta Treviranus: Pushing forward with that AI, and I'm hoping that you can help to make sure that.

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Jutta Treviranus: That we take advantage of the opportunities without bearing the risks.

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Jutta Treviranus: Um.

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Jutta Treviranus: To have the right to ask this of us, you need to have a deeper understanding of the relationship between disability and technology. There's a saying for most people, technology makes things convenient. If if you have a disability, technology makes things possible.

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Jutta Treviranus: And therein lies that awesome responsibility.

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Jutta Treviranus: Technology is relied upon by people with disabilities to speak, read, write, learn, affect the world, navigate the world, eat, express, love, remember, plan.

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Jutta Treviranus: Breathe, and even live.

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Jutta Treviranus: Our relationship to technology by necessity is more intimate. It is essential because we have no choice. It is what makes things possible. And this relationship.

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Jutta Treviranus: Also makes us more vulnerable.

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Jutta Treviranus: We should not have to give our trust to a potentially abusive partner. We're disproportionately vulnerable to the mistakes and to the breaking.

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Jutta Treviranus: And beyond guarding our homes, it's implanted in our brains and in our vital organs.

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Jutta Treviranus: It's undeniable, though, that AI offers extreme opportunities for everyone, and these can make life-changing differences for people with disabilities. Of course you've probably all experienced some of these advantages, recognizing speech, patterns, gestures, finding a target object or pattern.

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Jutta Treviranus: Matching and labeling objects, remembering forever, and reminding on time, sorting possible paths, to find an optimum, detecting common mistakes and correcting them. How many of you remember how to spell or remember how to do good grammar. Given that, we've been relying on all these AI tools.

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Jutta Treviranus: AI is very good at mechanizing the formulaic. It is promoted to act as robotic. Personal service workers create intelligent.

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Jutta Treviranus: Prosthetics, restore vision, and even read your mind through your Eeg pattern. Next week I'll be in Banff and.

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Jutta Treviranus: At a meeting of the brain computer interface initiative. And it's a massive conference now.

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Jutta Treviranus: A new assistive technology is announced almost every week.

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Jutta Treviranus: Among the current functions. And this is a very, very incomplete list. I didn't get a chance to update this. There's AI for image to text description, real time, captioning sound, filtering.

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Jutta Treviranus: Voice, control, personal voice, output, exoskeleton, optimization, gesture, control. And I'll share my slides and perhaps a list of the many links. And Samara can probably provide quite a few additional ones.

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Jutta Treviranus: There's smart home systems and robotic assistance, memory and recall, like rewind AI, simplification and summation like Tangle AI writing support like Chat Gpt. And as I mentioned, Bci or brain computer interfaces.

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Jutta Treviranus: There are also assessment, tools, accessibility, evaluation, tools, accessibility, repair tools and research tools. So the the.

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Jutta Treviranus: There. Um! And I'm sure, even as we speak today, there will be a newly announced AI tool that will be helpful.

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Jutta Treviranus: But even with these extremely helpful life-changing systems there are some flies in the ointment.

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Jutta Treviranus: Amongst them is that AI makes people vulnerable to privacy. Breaches, and data, sharing agreements often extend to 3rd parties with undeclared motives. How many of you have actually read the legalese before you hit. I agree.

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Jutta Treviranus: Um, video capture systems surveil the users and others surrounding the user, and apps often come with targeted advertising.

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Jutta Treviranus: The AI pushes the users towards stereotypical responses or behaviors, which means that you lose your individuality and your individual quirkiness and differentiation.

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Jutta Treviranus: So high school students using this system have said that the pressure to be typical is increased because AI can hide that uniqueness, does it make it harder for people who can't.

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Jutta Treviranus: Use or afford the AI. Does it decrease the tolerance for.

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Jutta Treviranus: Personal quirks and differences.

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Jutta Treviranus: Right. Also, the benefit of these amazing AI systems are inverse to the need.

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Jutta Treviranus: It works the worst for people that need it the most. If your speech is further from the average, if you're blind and the environments you're in is poorer, or the product labels.

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Jutta Treviranus: You want to identify are in a non-english language.

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Jutta Treviranus: In the workplace. It's often assumed that an AI tool will work for everyone with a given disability, not recognizing that the effectiveness is variable. Many employers have said to me, Well, wait a sec. We don't need to do this because there's another employee who's blind, who can use AI.

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Jutta Treviranus: Why does this particular individual require these additional accommodations?

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Jutta Treviranus: Because much of the intelligence is in the cloud. These systems consume a great deal of bandwidth, and this is not a cost that most disability financial benefit programs recognize, not to mention the environmental costs of AI and think about the.

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Jutta Treviranus: Portugal and Spain blackouts which have been attributed to AI.

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Jutta Treviranus: Also the goal of AI is not is to sound believable. It isn't. To tell the truth, it produces believable.

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Jutta Treviranus: Or pastiche. It sounds most confident when it repeats stereotypes, and the believable untruths can be quite hurtful.

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Jutta Treviranus: After all, what is the data we have fed? A I about disability? It's a horrifying cocktail of ableist slurs, disabled people seen as inferior, unattractive, tragic victims, suffering.

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Jutta Treviranus: There are plenty of bad jokes involving disability, and then we have benevolent ableism, or what has been called inspiration. Porn.

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Jutta Treviranus: Um, where people with disabilities are.

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Jutta Treviranus: Pictured as these heroic individuals that are overcoming adversity.

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Jutta Treviranus: But the protections against these tend to backfire captioning toxicity filters that replace words deemed to be toxic with misleading, innocuous words prevent students who need captioning from understanding topics on sensitive subjects. This has certainly happened.

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Jutta Treviranus: At Ocad, when we talked about the sex trade, or any topic that have.

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Jutta Treviranus: Anything to do with, say sex, or use profane language, or use or talk about any topic. Try swearing at your AI system.

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Jutta Treviranus: People with facial differences are also have also been deemed toxic and cancelled from Instagram. And there's many other examples where toxicity filters have gone awry.

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Jutta Treviranus: But I'm also worried about another extreme risk of AI AI, I think, is.

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Jutta Treviranus: Constructing an infrastructure of statistical discrimination.

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Jutta Treviranus: And there's a story that I've told quite often. It actually happened back in 2013.

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Jutta Treviranus: Which means that it's almost 12 years ago, and Cindy may remember some of this, but it's regarding my 1st alarm. I 1st began using AI back in the eighties, and I was using it.

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Jutta Treviranus: To create a hidden Markov model to recognize dysarthric speech, and I was pulled back into AI when.

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Jutta Treviranus: Um. The Ministry of Transportation here in Ontario was celebrating its 100th anniversary, and they asked us to.

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Jutta Treviranus: Test a number of autonomous vehicle machine learning models that would be used to guide vehicles through busy intersections. I decided to test them with an unexpected scenario, and this is a friend of mine who moves backwards with her wheelchair. She's very fast and efficient.

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Jutta Treviranus: But very erratic. Other people who encounter her in intersections often think she's lost control and try to push her back to the curb. She's come from.

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Jutta Treviranus: All the AI systems I tested chose to proceed, and if they had been deployed they would have run her over.

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Jutta Treviranus: All of the AI systems. Developers said, Don't worry. These are immature systems. We don't have enough data about people in wheelchairs.

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Jutta Treviranus: In intersections come back when we've trained them with more data. And, in fact, they oversampled the data related to people in wheelchairs and intersections. But when I came back to test those systems with these.

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Jutta Treviranus: These smarter AI systems that had filled the data desert regarding disability, they decided to run.

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Jutta Treviranus: Her over with greater confidence. They were confident that people in wheelchairs moved forward, and therefore the.

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Jutta Treviranus: The autonomous vehicle could proceed. And this is the main point of that particular story.

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Jutta Treviranus: Much of what you hear when you hear about AI bias and what needs to be done to protect people with disabilities, talks about filling the data desert, making sure that people with disabilities are proportionally represented in data sets. But even if that were possible.

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Jutta Treviranus: The AI would still not attend to the outlier. It would.

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Jutta Treviranus: Use statistical reasoning to determine what is the most likely situation, and decide with that likely situation.

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Jutta Treviranus: Um.

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Jutta Treviranus: This is of greatest concern. When AI is used to find match sort, label, measure, optimize, calculate, analyze people at scale.

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Jutta Treviranus: There is a problem with how AI is designed, and with people with disabilities are the ones most vulnerable to the harm caused. Because we're at the edges of every other justice deserving group people with disabilities are often collateral damage in the emerging AI race.

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Jutta Treviranus: Bias towards an optimal pattern means bias against difference. And of course, if you have a disability, you epitomize difference different ways of doing the job. Different digital traces, different work and education histories, different social media topics, an entangled profile of many differences and bias towards the optimal pattern means.

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Jutta Treviranus: This bias against you.

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Jutta Treviranus: AI is propagating the discrimination that was there faster, more efficiently, and more accurately. And it is homogenizing towards a monoculture.

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Jutta Treviranus: And um, if there's anyone.

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Jutta Treviranus: From with Irish heritage. There, you know that monocultures don't survive and can be.

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Jutta Treviranus: Felled by a single blow.

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Jutta Treviranus: Um and.

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Jutta Treviranus: This pattern is.

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Jutta Treviranus: Happening everywhere. With all our life altering difficult decisions. AI is used by over 90% of organizations in hiring, according to the Us. Equal Employment Opportunities Commission, which unfortunately, has now been shuttered in the Us. And I don't know how many of you heard the Cbc story yesterday about how AI interviews people.

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Jutta Treviranus: In hiring situation. It's being applied and offered to competitive academic admissions departments to beleaguered health providers in the form of medical calculators and emergency triage tools.

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Jutta Treviranus: To policing, to parole boards, to immigration and refugee adjudicators, to tax auditors, to loans and mortgage officers, and to security departments.

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Jutta Treviranus: As AI gets better or more accurate in its identification of the optima. In hiring or admissions, for example, AI gets more discriminatory and better at eliminating applicants that don't match the Optima in some way. I'm sure many of you are using productivity tools such as Microsoft, Viva, or Bossware.

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Jutta Treviranus: In your employment, and all of that data contributes towards building out a much more granular pattern of what is average and what is not average.

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Jutta Treviranus: And this leads to, of course, bad, unfair, inaccurate decisions.

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Jutta Treviranus: And if you're an outlier, you're also subject to false flagging in suspicion systems such as fraud detectors or security systems when traveling.

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Jutta Treviranus: Which, of course, has come out in our monitoring of those harm and incident databases.

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Jutta Treviranus: At a community level. We have evidence-based investment by governments, AI guiding political platforms, public health decisions, urban planning, emergency preparedness and security programs, and none will decide. With the marginalized outliers and outliers will be marked as security risks.

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Jutta Treviranus: And these are some monumental decisions, life-changing decisions. But even the smaller.

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Jutta Treviranus: Seemingly inconsequential decisions can harm by a million cuts. What gets covered by the news, what products make it to market.

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Jutta Treviranus: The recommended route provided by the GPS. How many of you have tried to get a GPS to tell you the accessible route, unless it's actually a product that is intended to do that.

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Jutta Treviranus: The priority given to supply chain processes. What design features make it to market.

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Jutta Treviranus: And of course this harm predates AI. Statistical reasoning as a means of making decisions does harm. It does harm to anyone not like the statistical average or the statistically determined optima. And so this is why I'm.

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Jutta Treviranus: Saying there is. If we don't do something about this, we're creating an infrastructure of digital eugenics.

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Jutta Treviranus: Assuming that what we know about the majority applies to the minority does harm.

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Jutta Treviranus: And unfortunately, one of the things that I'm more concerned about now as well is the systems that are being used to protect.

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Jutta Treviranus: People with disabilities or to protect against harm, because it's more than addressing data gaps more than removing human bias from algorithms and more than removing stereotypes from labels and proxies that are used to label the data and to determine what might be the optima.

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Jutta Treviranus: The systems that are intended to remove bias.

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Jutta Treviranus: And prevent harms. Use statistical reasoning.

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Jutta Treviranus: As well. One of the things that you'll note if you do a search on AI ethics. It's a burgeoning industry, and many of these companies are certifying AI as ethical, without actually considering the risks to outliers.

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Jutta Treviranus: The harms to people with disabilities are insignificant when determining impact metrics and thresholds and impact assessment and risk benefit. Assessors have shown that it would take many outlying fatalities to signal a significant risk.

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Jutta Treviranus: In error, testing and risk benefit analysis tools. While it works for other discriminated identities such as gender or race. There are no bounded.

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Jutta Treviranus: Data clusters for disability to make cluster comparison effective identification, self identification doesn't work very well because of the stigma that is frequently associated with disability, and many people don't self identify.

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Jutta Treviranus: So the statistic, these.

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Jutta Treviranus: Specific risks will be dismissed as anomalies and merely anecdotes, even though they're hugely critical.

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Jutta Treviranus: And unfortunately, while many have focused on privacy, the reality is that privacy protections also don't work. If you're different, while people with disabilities are most vulnerable to data, abuse, and misuse the systems that we've implemented here in Canada, de-identification as source.

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Jutta Treviranus: Doesn't work. If you're highly unique, you will be re-identified, especially when data is aggregated.

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Jutta Treviranus: Differential privacy which removes the helpful data specifics that you need to make the AI work for you and your unique needs is the alternative. And of course, this means that we're not going to really.

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Jutta Treviranus: Push AI to serve.

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Jutta Treviranus: The individuals out at that edge.

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Jutta Treviranus: And unfortunately the situation is that most people with disabilities have already bartered their privacy for essential services. When the choice is between giving away your.

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Jutta Treviranus: Personal data versus getting the services that you need to stay alive and to continue to function.

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Jutta Treviranus: You're going to choose those essential services. So we need to go beyond privacy, assume there will be breaches and create systems to prevent data, abuse and misuse. We need to ensure transparency regarding how data is used, by whom and for what purpose.

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Jutta Treviranus: But um! Getting back to the less sort of bleak story, I think the gift of AI is that it offers us a magnifying mirror of our current conventions and assumptions, giving us an opportunity to reflect on our trajectory as a society.

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Jutta Treviranus: Do we wish to speed in the direction our society is currently moving? Or do we need to reconsider these many conventions that we're now amplifying? Using AI.

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Jutta Treviranus: Power and getting to.

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Jutta Treviranus: The how are we addressing trustworthy AI.

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Jutta Treviranus: At the Idrc. And I'm going to pull in Cindy in a second. But just as an overview to give you some sense of of our processes at the inclusive Design Research Center.

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Jutta Treviranus: I know that many of you are designers, and you're probably familiar with the design, thinking squiggle.

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Jutta Treviranus: And in the design, thinking squiggle. I have that represented on the screen at the moment. What happens is you iterate to think about a variety of possibilities, and then you competitively reduce to a winning formula through those iterative processes. And that is the the winning.

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Jutta Treviranus: Iterative formula for good is what is then scaled and replicated.

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Jutta Treviranus: Um throughout um.

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Jutta Treviranus: One of the problems that we find with that is that where there are winners there's generally losers, and the individuals that are out at that outer edge are generally the losers, because, of course, decision processes are usually done by consensus and majority rules, and they.

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Jutta Treviranus: Um when.

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Jutta Treviranus: It's decided with the majority or the people that that feel the greatest, or that will.

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Jutta Treviranus: Have the largest number of people impacted, then those outliers are the ones that lose. So what we implement instead is what we call the virtuous tornado where what we're doing is, we're trying to create a system that stretches to address as many needs as possible. We're creating adaptive, flexible system that will have greater longevity, and that can adapt to the unexpected changes that.

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Jutta Treviranus: And we use what we've developed what we call the Canadian school of inclusive design. And we have a master's program.

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Jutta Treviranus: And soon to be. Have a doctoral program in this area, and the origin is in digital accessibility for those of you familiar with universal design which is was developed within.

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Jutta Treviranus: Architecture, and in within industrial design. We thought that.

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Jutta Treviranus: That digital systems would give us an opportunity to move from one size fits one that you need to do when you say, have a doorway to one size.

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Jutta Treviranus: I mean, from one size fits all which happens in a doorway to one size fits one because digital systems are so mutable. And we design with and by people experiencing the greatest barriers.

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Jutta Treviranus: Because they're also.

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Jutta Treviranus: And we also use those individuals as the indicators of success. So it isn't by numbers or by statistics. We determine that our designs are working.

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Jutta Treviranus: But rather have we reached as far out in that human Star Wars as we possibly can.

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Jutta Treviranus: And we try to change the game, not just invite people to the game and integrate.

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Jutta Treviranus: And change the system to benefit everyone, and this is expressed in our 3 dimensions of inclusive design, which I won't go through right now, but I can share with you. So what are some of the things we do to address statistical discrimination? We try to flip the perspective. Cindy created this amazing.

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Jutta Treviranus: Inverted word cloud. Many of you have probably participated in a word, cloud exercise, where someone asks a question and everybody submits a response, and the most common words move to the middle, and they grow in size. So everybody attends to them and piles on with those popular words. What we've done is, we've inverted it. So the novel, unique words.

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Jutta Treviranus: And go to the middle and grow in size.

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Jutta Treviranus: The. We are also playing with inverting dominant algorithms when you're selecting possible employees or students for admission.

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Jutta Treviranus: Pushing from data exploitation to data, exploration from homogenization.

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Jutta Treviranus: To diversification.

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Jutta Treviranus: And we're creating tools to reduce harm by signaling when a model will be wrong or unreliable, because the person being decided about is far from the mean or average.

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Jutta Treviranus: In the training data of the model. And we're creating a technical specification for this.

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Jutta Treviranus: Together with the Standards Council of Canada.

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Jutta Treviranus: And um, we've been playing with algorithmic, more sort of art pieces and design pieces like the lawn Mower of justice, where we remove.

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Jutta Treviranus: The top of the Gaussian curve.

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Jutta Treviranus: By not allowing, any more than a certain number of repeats of any data element, such that the model needs to attend to the.

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Jutta Treviranus: More of the periphery of the data.

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Jutta Treviranus: And we're pushing.

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Jutta Treviranus: The models to where they're needed the most by creating.

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Jutta Treviranus: Language models for people.

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Jutta Treviranus: That are non-speaking children and adults who use a symbol-based semantic shorthand to communicate.

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Jutta Treviranus: Starting at the edges for greater innovation, and then, lastly, for those of you who attended yesterday's session. We're also trying to fill the regulatory vacuum with a regulatory standard for the accessible Canada Act, called the Accessible and Equitable AI Standard.

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Jutta Treviranus: To be referenced in the EU as well, and here there are 4 parts, and nothing.

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Jutta Treviranus: A nothing without us, part which ensures that AI systems are accessible, and people with disabilities can participate in all roles related to AI, not just as consumers, but also as producers.

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Jutta Treviranus: Um assist.

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Jutta Treviranus: Part that talks about equitable AI protecting against all of those inequities that occur, or that can happen with AI.

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Jutta Treviranus: A part about organizational processes that support accessible and equitable AI, and a part about education ensuring that people are educated about accessible and equitable AI, and that AI. Education is accessible to people with disabilities.

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Jutta Treviranus: And specific to disability. Um, we, in addition to the accessibility we have, we had tried to address statistical discrimination, cumulative harm, and of course, the education portion.

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Jutta Treviranus: And the the draft standard is available, and we will share a link to that. And Cindy is going to talk a little bit about some other.

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Jutta Treviranus: Possibilities for how to address.

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Jutta Treviranus: Equitable AI including, and I'll turn it over to Cindy, and you can tell me when to go to the next screen. I haven't showed Cindy these slides.

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Jutta Treviranus: So she's sort of dumped in the middle of this. Sorry about that. Go ahead.

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Jutta Treviranus: Cindy, do you want to unmute yourself? Yeah.

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Cindy Li: Oh, yes. Yeah, sure. Uh.

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Cindy Li: Okay, thank you for putting me on a spot.

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Cindy Li: So right now. So we are working on a project.

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Cindy Li: That's to use the AI tools to help people with disabilities, to communicate better and faster with other people. So in.

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Cindy Li: Though in those cases um.

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Cindy Li: We are using on device models. So which means we, we are using small language models. So the model right now, we're choosing is using a llama 3.1 7 billion model. So which.

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Cindy Li: Is which which has a good balance between and the power and the.

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Cindy Li: Memory and resource, requirements for devices.

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Cindy Li: So for running those on device models. So apparently the benefits uh Utah is showing in this slides. So in that case, your data, the users. Data won't leave your device so it protect.

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Cindy Li: Uses privacy and user specific data. So you don't have to worry to send it to a cloud for processing and losing some of your sensitive data, losing a control of your sensitive data. So and also when we run those otherwise small models.

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Cindy Li: They only require a limited compute powers and memory, so that it's it's able to run locally.

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Cindy Li: But the also there's a disadvantage of having those on device models.

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Cindy Li: So 1 1 disadvantage is, you have to maintain a broad range of devices.

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Cindy Li: So, for example, when you run things on mobile devices and.

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Cindy Li: There's Android Android, there's also Ios. So and for computer types, there's different types of computers like Mac system or windows system.

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Cindy Li: So you it will be a little bit harder to maintain a broad range of devices. In that case.

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Cindy Li: Um. So you that so can we move to.

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Cindy Li: All right. So the next is the next direction we are looking into is.

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Cindy Li: Personalized models. So when we work with people with disabilities, they have different level of disability. So and usually people with.

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Cindy Li: One. Disability has multiple disabilities, so they may have limited.

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Cindy Li: Um motor ability. There is a cognitive disability and combined disabilities.

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Cindy Li: So different. So every user may have their own specific needs.

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Cindy Li: Um in. So when it comes to our project where we use the language model to help people with disability, so we want to find tune the model with personalized data, so that.

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Cindy Li: This. This model understands this person's unique communication style and can present that personalize towards this person's needs.

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Cindy Li: So their pros and cons are also distill here. The benefit is very obvious. So you you can serve unique leads of a person. So, but it's also harder to test and maintain, because.

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Cindy Li: Every model is unique. So there's a different specific attributes in that personalized model. So you sort of you have to write some unique tests.

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Cindy Li: For testing personalized model. And and also when you do the testing, when you you have to.

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Cindy Li: Uh, be careful with the sensitive data that person provides you. So when you do the fine tuning, when you use this person's data, you have to anonymous uses sensitive data for for that part.

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Cindy Li: And you, okay, um.

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Cindy Li: So.

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Cindy Li: Right. So this page is more about what you should check for bias.

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Cindy Li: Model before you deploy. So number one is as a part of the testing you need to. We need to integrate bias checks.

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Cindy Li: And also we need to do the various audits frequently. E- even after you, you have deployed your uh your system, you steers. You do.

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Cindy Li: Um periodically for this audit.

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Cindy Li: And regarding the data set we use for fine tuning. We also need to make sure your data set.

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Cindy Li: Has, has.

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Cindy Li: Um eliminate the buyers. So it has balanced the data.

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Cindy Li: To represent the underrepresented groups.

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Cindy Li: Uh.

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Jutta Treviranus: Oh, sorry. Cindy. Yeah. Um.

01:18:04.000 --> 01:18:06.000

Cindy Li: Mhm.

01:18:04.000 --> 01:18:22.000

Jutta Treviranus: I should have shown Cindy these slides ahead of time. But um! I'm hoping that we can explore these topics a little bit more in the remaining time. Um, and I understand that we are. We have until 1230. Right? Is that right? Great? Okay.

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Jutta Treviranus: So um.

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Jutta Treviranus: But get your questions ready. I haven't been able to monitor the chat because I only have this one screen, but I'm hoping that there are plenty of questions, and we can.

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Jutta Treviranus: Tell you more about some of the the tactics that we have. I also want to.

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Jutta Treviranus: Recruit you as advocates, even if you're not developers, because we're at this pivot point here in Canada at the moment.

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Jutta Treviranus: Where, of course, geopolitically, there has been a withdrawal from any AI protections in the Us. And before.

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Jutta Treviranus: Um, the.

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Jutta Treviranus: Uh January 20.th Actually, on November 6, th I was um uh.

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Jutta Treviranus: At a meeting with the Us. Access Board and a number of the larger development companies, and the evening before the election everyone was very, very attentive and cooperative, and wanted to to help us out. And then the next day you could just see this. The.

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Jutta Treviranus: The switch had flipped, and much of what we were fearing at that time actually has happened. The Us. Which has most of the large companies has withdrawn from many of the protective.

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Jutta Treviranus: Systems. We are, of course, working still with a number of states and cities to.

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Jutta Treviranus: Produce State-based protections. One notable group is the New York City.

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Jutta Treviranus: Bar Association which is trying to create model regulations that and.

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Jutta Treviranus: Standards that can be deployed within States that are willing to.

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Jutta Treviranus: Push against the inequities and discrimination that is happening.

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Jutta Treviranus: But here in Canada we now have an AI um.

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Jutta Treviranus: Or a minister of.

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Jutta Treviranus: Of AI, and we're hoping that.

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Jutta Treviranus: To make that minister of AI aware of both the benefits and the harms that can happen if we don't design the AI, so that we attend to people who tend to be extremely different, and and who tend to be outliers, including people with intersectional needs. Because what I've been talking about is disability. But.

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Jutta Treviranus: There anything that pushes you away from the average of the data set.

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Jutta Treviranus: Is likely to also come with these discriminatory effects.

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Jutta Treviranus: And what we're hoping is that we can.

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Jutta Treviranus: Move AI forward at the speed of trust, and one of the things that.

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Jutta Treviranus: We have learned through the work at the Idrc. Is any intelligence, whether it is.

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Jutta Treviranus: Human intelligence, or.

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Jutta Treviranus: Machine intelligence that actually attends to and and works with our human scatterplot or the edges of our human scatterplot is able to adapt to change and respond to the unexpected. And we're going to have a lot of.

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Jutta Treviranus: Unexpected things detect risk. Better transfer to new contexts, results in greater dynamic resilience and longevity will reduce disparity, and we're hoping, hoping that it may hold the key to our survival, and we're going to share.

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Jutta Treviranus: A number of these links that we have, including to the accessible Canada site that has the standard, our Idrc site and everything we create is open access, openly licensed, so.

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Jutta Treviranus: You can take it, you can put your name on it and claim it's yours. You can use it in whatever way you wish, and we have a we count site where we try to keep up to date with what's happening in AI and data and people with disabilities.

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Jutta Treviranus: And I have to acknowledge accessible standards. Canada and the William and Flora Hewlett foundation for supporting us, and I'm going to stop sharing so.

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Jutta Treviranus: You can um.

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Jutta Treviranus: We can take questions from everyone, and Cindy's going to help me answer.

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Saamer Mansoor: Hey? Thank you so much.

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Saamer Mansoor: Really really appreciate that? Um.

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Saamer Mansoor: So we do have a few items. Um.

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Saamer Mansoor: You know. Obviously.

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Saamer Mansoor: Um, there's a lot that we have to reflect on, not just in terms of like how we build these AI systems, but also like how we.

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Saamer Mansoor: Which ones we choose in the organizations that we work.

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Saamer Mansoor: Um, especially like, you know. And it it's done necessary that it is. It has to be government organizations. I know we have some people from Uh different government of Canada organizations, but also, like.

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Saamer Mansoor: Corporations with the services that we provide.

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Saamer Mansoor: Um, so I don't.

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Saamer Mansoor: I I'd love to open the floor for questions and discussions in the remaining time that we have, whether you're a developer designer.

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Saamer Mansoor: Policymaker or just someone curious.

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Saamer Mansoor: We invite you to jump in? Uh? Are there any questions that have already been asked? Lauren.

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Windsor Hackforge: We do have one question in the chat.

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Windsor Hackforge: Pamela would like to know? What kind of AI tools can we create and use in the workplace to improve accessibility or the accommodation process?

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Jutta Treviranus: Um, that's a great question. And uh the um.

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Jutta Treviranus: One of the things that actually, Pamela, if you are a developer, one of our efforts that we are going to be working on is a.

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Jutta Treviranus: AI um.

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Jutta Treviranus: Authoring tool specification. Um, those of you. I don't know how many of you. Maybe you can use the hands.

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Jutta Treviranus: And raising tool, know of wcag, web, content, accessibility, guidelines, and how many of you have participated in.

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Jutta Treviranus: Um wcag, or what Ali efforts, etc.

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Jutta Treviranus: Um. Well, the web content, accessibility. Guidelines, of course, are about. How do you make.

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Jutta Treviranus: Web content accessible. So it's it's technical specifications for what.

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Jutta Treviranus: Web content should look like when it is accessible. But it's actually part of 3 standards. So there's a user agent or the browser standard. And there's an authoring tool standard. The authoring tool standard is something that.

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Jutta Treviranus: Ensures that the authoring tools, right from the beginning, from default, are creating what are called born accessible contents. So.

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Jutta Treviranus: The the default production of authoring tools. And of course, most people use authoring tools to create web content.

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Jutta Treviranus: But it it um.

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Jutta Treviranus: Doesn't produce inaccessible content, so you don't need to repair it, and you don't need to.

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Jutta Treviranus: When you evaluate or you test it, you do still need to detest it. There isn't going to be very much that that actually needs to be repaired, and that.

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Jutta Treviranus: We? Um, I mean, we've we've always realized that that is probably the best way.

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Jutta Treviranus: To ensure that the content on the web, the content in apps, etc. Or the the user experience. The interface is going to be accessible because there are.

01:25:58.000 --> 01:26:10.000

Jutta Treviranus: Rather than pushing the burden of creating accessible content onto everybody that creates web content. And there's even, you know, examples of where your dog can create web content.

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Jutta Treviranus: You are actually um.

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Jutta Treviranus: We're creating the a number. The these.

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Jutta Treviranus: Limited number of tools that will automatically produce the content or the accessible content. So what I would invite people to do is to participate in.

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Jutta Treviranus: This particular effort to create specifications and exemplars and models.

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Jutta Treviranus: For how do we ensure that whatever we create is accessible right from the start, so that we don't need to repair it, that we don't, that our evaluations will show.

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Jutta Treviranus: That people with disabilities are not excluded.

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Jutta Treviranus: Um, but other um.

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Jutta Treviranus: I think creating a test bed.

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Jutta Treviranus: For using AI systems. AI assistive technologies would be really great. One of the concerns I have within our university, especially as more and more students are availing themselves of.

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Jutta Treviranus: AI for helping with all sorts of things is that if you have a disability because of the inaccessibility of these systems, and because of the financial burden that.

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Jutta Treviranus: Obtaining these systems often entails, there's inequitable access to it. So creating a way for all employees or all students to have equitable access to whatever.

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Jutta Treviranus: Uh uh.

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Jutta Treviranus: Supports or AI based systems would be really great.

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Jutta Treviranus: Um, Samar, you probably you you look like you're nodding, and you have other advice as well.

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Saamer Mansoor: Yeah, we actually had a conversation about this uh, just yesterday. And.

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Saamer Mansoor: Um. You know, one of the things that we noticed is that.

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Saamer Mansoor: Um. Standards aren't being taught.

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Saamer Mansoor: And so uh.

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Saamer Mansoor: It. It would make so much sense to.

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Saamer Mansoor: Almost mandate, you know, if you're teaching web development.

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Saamer Mansoor: Teach the web content access guidelines. You know. People go through university for your degrees, and they have never heard of.

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Saamer Mansoor: You know. Uh the web content access guidelines.

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Saamer Mansoor: And so really.

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Saamer Mansoor: It, you know. The the question that we had was like.

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Saamer Mansoor: Are these enforceable, you know, like can.

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Saamer Mansoor: Can these policy guidelines, like.

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Saamer Mansoor: Be enforced.

01:28:51.000 --> 01:28:54.000

Saamer Mansoor: Um, you know. And what would Enforcement.

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Saamer Mansoor: Kind of look like uh.

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Jutta Treviranus: Right, yeah.

01:28:57.000 --> 01:29:00.000

Saamer Mansoor: Because, because, like the W, the the Webcon access guidelines.

01:29:00.000 --> 01:29:06.000

Saamer Mansoor: Are supposed to be enforceable. And they're they're very specific. But you know, yeah, people don't follow. But.

01:29:07.000 --> 01:29:11.000

Saamer Mansoor: Does the country do much about enforcing it?

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Jutta Treviranus: Yeah. And and therein lies the dilemma of.

01:29:11.000 --> 01:29:13.000

Saamer Mansoor: You know.

01:29:14.000 --> 01:29:18.000

Jutta Treviranus: Regulating digital systems. Because, of course.

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Jutta Treviranus: In order for them to be easily enforceable and testable.

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Jutta Treviranus: They need to be very techno specific. And the minute you become techno specific, you are reducing the ability to change. And of course, these are these things are moving so quickly and so frequently. Accessibility is pitted against innovation.

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Jutta Treviranus: Which, of course, innovation always wins. Right accessibility is.

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Jutta Treviranus: Is not very well supported by the enforcers which tend to be government, and government wants innovation.

01:29:53.000 --> 01:29:55.000

Jutta Treviranus: Um. So the.

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Jutta Treviranus: One of the things that we've been looking at is, how do we.

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Jutta Treviranus: Create systems that encourage.

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Jutta Treviranus: Compliance without the need to be highly techno specific. How do we create incentives.

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Jutta Treviranus: And the necessary supports. So it becomes easier to actually create something that's accessible than to create something that is inaccessible.

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Jutta Treviranus: Or that um.

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Jutta Treviranus: Going directly to the original. I think one of the problems with Wcag has been it does put the burden on the general populace right.

01:30:38.000 --> 01:30:50.000

Jutta Treviranus: Everybody that is, is creating web content, all of those small medium enterprise companies, all of those content creators, the not for profits, the private individuals, as opposed to.

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Jutta Treviranus: Putting that burden on the, on the companies that are creating the tools with which we create the content. And so we want to go upstream to the.

01:31:02.000 --> 01:31:11.000

Jutta Treviranus: The actual developers. How do we do that? That requires, of course, some participation by someone that has leverage over.

01:31:11.000 --> 01:31:20.000

Jutta Treviranus: These large companies, and who has leverage both, I mean the the general consumer. So if we can.

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Jutta Treviranus: Try to recruit the general consumer.

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Jutta Treviranus: To and make them aware. As you say, education, I think, is a huge part awareness of these problems, recruiting people to help.

01:31:33.000 --> 01:31:38.000

Jutta Treviranus: With this would be great. Yeah.

01:31:38.000 --> 01:31:44.000

Jutta Treviranus: And influencing the the larger companies that are that have a lot of the power and and.

01:31:45.000 --> 01:31:47.000

Jutta Treviranus: The decision-making.

01:31:47.000 --> 01:31:51.000

Jutta Treviranus: Who make the decisions about what goes out there and what doesn't.

01:31:51.000 --> 01:31:53.000

Jutta Treviranus: But, Samar, you probably have some.

01:31:53.000 --> 01:31:59.000

Jutta Treviranus: Some uh samura. You probably have uh some ideas as well, and I'm mispronouncing your name. I'm so sorry.

01:32:00.000 --> 01:32:01.000

Saamer Mansoor: I told you.

01:32:01.000 --> 01:32:06.000

Jutta Treviranus: Yeah, I know. But but I have a student who who's who's called Samar. So.

01:32:08.000 --> 01:32:10.000

Saamer Mansoor: Uh, yeah, so.

01:32:10.000 --> 01:32:16.000

Saamer Mansoor: There. There are a lot of, you know, different possibilities, but it's, you know.

01:32:16.000 --> 01:32:19.000

Saamer Mansoor: Um, what what we were.

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Saamer Mansoor: Well, what we were thinking is.

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Saamer Mansoor: Uh, you know.

01:32:24.000 --> 01:32:35.000

Saamer Mansoor: We? Maybe the the guidelines might be a little too broad, but and it can be misunderstood in different ways, like one of them. For example.

01:32:35.000 --> 01:32:39.000

Saamer Mansoor: Mentioned that we have to have. We have to involve people.

01:32:39.000 --> 01:32:44.000

Saamer Mansoor: Um with disabilities from, you know the design phase all the way until deployment.

01:32:45.000 --> 01:32:47.000

Saamer Mansoor: Um. You know.

01:32:47.000 --> 01:32:50.000

Saamer Mansoor: In terms of like people with disabilities. It is very broad.

01:32:51.000 --> 01:32:54.000

Saamer Mansoor: And so it's like, how do we.

01:32:55.000 --> 01:32:59.000

Saamer Mansoor: Involve people with disabilities in a meaningful way.

01:32:59.000 --> 01:33:01.000

Jutta Treviranus: Right and.

01:32:59.000 --> 01:33:03.000

Saamer Mansoor: Uh, you know, in a cost, effective way as well.

01:33:03.000 --> 01:33:08.000

Jutta Treviranus: So I'm I'm glad you brought up cost because um, I think there's a Miss.

01:33:03.000 --> 01:33:05.000

Saamer Mansoor: You know.

01:33:09.000 --> 01:33:31.000

Jutta Treviranus: Their misunderstanding about the cost of involving people with disabilities, and it goes back to that starburst that I showed in order to get any new insights, or to get any new information from user testing or focus groups, or whatever engagement you have of consumers or users.

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Jutta Treviranus: In that middle. You need hundreds and hundreds and hundreds of people right? Because they're all going to tell you the same thing.

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Jutta Treviranus: But it only requires a few people out at that edge, because they're likely to experience quite a number of the issues that have not as yet been addressed.

01:33:52.000 --> 01:34:02.000

Jutta Treviranus: And um, they. So you don't. Actually, it doesn't actually cost more. It costs less to to focus on the people that.

01:34:02.000 --> 01:34:07.000

Jutta Treviranus: Are having difficulty with the systems that you're developing, not the people that are.

01:34:07.000 --> 01:34:11.000

Jutta Treviranus: Completely satisfied with what you're doing.

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Saamer Mansoor: Yeah, we we yeah, we totally agree. And we we thought of ways like, you know, customer discovery.

01:34:11.000 --> 01:34:12.000

Jutta Treviranus: Okay.

01:34:17.000 --> 01:34:18.000

Jutta Treviranus: Yeah.

01:34:17.000 --> 01:34:19.000

Saamer Mansoor: People are like, Oh.

01:34:19.000 --> 01:34:21.000

Saamer Mansoor: You know um.

01:34:22.000 --> 01:34:24.000

Saamer Mansoor: Make sure it felt like.

01:34:25.000 --> 01:34:27.000

Saamer Mansoor: It would be good to.

01:34:27.000 --> 01:34:31.000

Saamer Mansoor: You know, point people to um.

01:34:31.000 --> 01:34:35.000

Saamer Mansoor: This. You know what it could look like. You know what.

01:34:35.000 --> 01:34:38.000

Saamer Mansoor: Could, involving people with disabilities look like I felt like.

01:34:38.000 --> 01:34:44.000

Saamer Mansoor: Um, you know, that could be a potential, you know, just mentioning.

01:34:44.000 --> 01:34:46.000

Jutta Treviranus: Yeah, definitely.

01:34:45.000 --> 01:34:49.000

Saamer Mansoor: I, and and you know we don't have to mention in the guidelines. I feel like, you know, we can have um.

01:34:50.000 --> 01:34:53.000

Jutta Treviranus: Yeah, there will be technical support documents.

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Saamer Mansoor: Exactly, exactly.

01:34:53.000 --> 01:34:59.000

Jutta Treviranus: Guidelines are sort of the the um, the framework, the skeleton upon which we then.

01:34:58.000 --> 01:34:59.000

Saamer Mansoor: Yes.

01:34:59.000 --> 01:35:06.000

Jutta Treviranus: Add advice and supports and tools that can be used. So our trust meter.

01:35:06.000 --> 01:35:12.000

Jutta Treviranus: Tool or technical specification will accompany the guidelines. We're also going to be.

01:35:12.000 --> 01:35:19.000

Jutta Treviranus: Creating a Fintech specific system, a cyber security specific technical guide.

01:35:19.000 --> 01:35:24.000

Jutta Treviranus: Um, and I think there there will be a service design.

01:35:25.000 --> 01:35:33.000

Jutta Treviranus: Specific guide as well. That goes with it, and within the service, specific guide or service design, guide.

01:35:34.000 --> 01:35:40.000

Jutta Treviranus: Will address things like consultation, fatigue, unfortunately, when.

01:35:40.000 --> 01:35:50.000

Jutta Treviranus: Many people with disabilities have experienced this sort of almost performative or full consultation, where the decisions have already already been made.

01:35:50.000 --> 01:35:55.000

Jutta Treviranus: And they're brought in to check off. Yes, we've consulted with people, with disabilities, and it's usually.

01:35:55.000 --> 01:36:04.000

Jutta Treviranus: You know the 5 usual suspects who all get called in again and again, and again, and.

01:36:04.000 --> 01:36:10.000

Jutta Treviranus: They're not actually given any agency or determination of of what the design should look like or.

01:36:10.000 --> 01:36:17.000

Jutta Treviranus: What the decisions are even or what the problem is. So the best thing to do is to.

01:36:18.000 --> 01:36:24.000

Jutta Treviranus: Bring in people who have difficulty with your systems, who are currently experiencing barriers.

01:36:25.000 --> 01:36:29.000

Jutta Treviranus: And people who are missing from your products and.

01:36:29.000 --> 01:36:31.000

Jutta Treviranus: I get them to help shape.

01:36:32.000 --> 01:36:39.000

Jutta Treviranus: The the goal, the problem statement, the challenge statement. Right from the beginning. Should we be deploying AI here.

01:36:39.000 --> 01:36:47.000

Jutta Treviranus: If we do deploy AI, what? What are some of the the concerns and potential harms the impact that this will have.

01:36:49.000 --> 01:36:54.000

Saamer Mansoor: Yeah, very nice. And then I had one question for Cindy.

01:36:54.000 --> 01:37:02.000

Saamer Mansoor: I know you mentioned on device. You mentioned several very uh, very key points that a lot of the developers brought up yesterday.

01:37:02.000 --> 01:37:05.000

Saamer Mansoor: Um. One of them was.

01:37:05.000 --> 01:37:09.000

Saamer Mansoor: You know how to test for bias and all these other things. So.

01:37:09.000 --> 01:37:12.000

Saamer Mansoor: Obviously, when we're creating the Llms.

01:37:12.000 --> 01:37:18.000

Saamer Mansoor: It. It might be a lot more easier. But when you're using an Llm. Out of the box.

01:37:19.000 --> 01:37:22.000

Saamer Mansoor: Are there any things you know that you recommend.

01:37:22.000 --> 01:37:24.000

Saamer Mansoor: To keep in mind? Or are there tests.

01:37:24.000 --> 01:37:29.000

Saamer Mansoor: That we can run that, you know you might have resources for.

01:37:29.000 --> 01:37:34.000

Saamer Mansoor: Um to make sure that people are are choosing the right Llm.

01:37:38.000 --> 01:37:54.000

Cindy Li: So in term of in terms of choosing a large language, model or language model. So it could be small language language model, like, for example, the 7 billion model, the number 7 billion model. What we choose is actually a small language model.

01:37:54.000 --> 01:38:02.000

Cindy Li: So I mean, I think, 1st of all, you need to understand your needs. You need to understand, like you need a large language model which has a.

01:38:02.000 --> 01:38:09.000

Cindy Li: Powerful, and probably provides more accurate output or a small language model.

01:38:09.000 --> 01:38:14.000

Cindy Li: Um. So nowadays I think the the trend is.

01:38:14.000 --> 01:38:28.000

Cindy Li: Going towards the small model rather than large model. So there are lots of like concepts of model distillation, so which transfers the knowledge from large language model to small language, model for specific task.

01:38:28.000 --> 01:38:35.000

Cindy Li: So, for example, if you want to have a model running on users device and just doing a prediction task.

01:38:35.000 --> 01:38:39.000

Cindy Li: So it it probably can do very well if you do a model distillation.

01:38:39.000 --> 01:38:42.000

Cindy Li: Tactic from our teacher, model.

01:38:43.000 --> 01:38:49.000

Cindy Li: So in terms of selecting model, it's really you have to evaluate your requirement.

01:38:49.000 --> 01:38:52.000

Cindy Li: And understand what you want.

01:38:52.000 --> 01:38:56.000

Cindy Li: And so that that's that's the.

01:38:56.000 --> 01:39:07.000

Cindy Li: 1st thing like you need to consider when choosing model. So, and secondly, you mentioned about how to test model. So in terms. So when we use a language model. So the.

01:39:07.000 --> 01:39:14.000

Cindy Li: 1st of all, when we want to find you a model, when we want to do anything with this model, to customize this model.

01:39:14.000 --> 01:39:27.000

Cindy Li: We need to build our own data set. So the 1st thing is you need to make sure your data set is balanced. So usually what we do is we examine their key attributes in the data sets.

01:39:27.000 --> 01:39:35.000

Cindy Li: And you can use python, or there are some other tools out there. So you can evaluate. You can create metrics.

01:39:35.000 --> 01:39:55.000

Cindy Li: Of how they're of the distribution of those key attributes. So which helps, you understand? Like which part you need more or more accurate data. So which part is overrepresented, which part is underrepresented. So um, so reducing their bias in your data set is is.

01:39:55.000 --> 01:40:03.000

Cindy Li: 1st thing is the probably one of the most important things to reduce the bias in your whole process.

01:40:04.000 --> 01:40:09.000

Cindy Li: So. And after that, when it comes to the algorithm, you also will write your code.

01:40:09.000 --> 01:40:15.000

Cindy Li: To to use the data to find your model. You also need to make sure you.

01:40:15.000 --> 01:40:32.000

Cindy Li: Reduce their by bias from your algorithm. So there, there's. So there's a a bunch of fairly testing tool out there. So by even for um, even if you don't want uh, don't, you can try with some tools like Ibm has their.

01:40:32.000 --> 01:40:38.000

Cindy Li: A fairly 3, 62, and there are some other tools, and even you.

01:40:39.000 --> 01:40:50.000

Cindy Li: You don't want to use those tool, you can you? You can just use python to use or use um, some visualization tool that helps you to decide like which.

01:40:50.000 --> 01:40:54.000

Cindy Li: Attributes you want and.

01:40:54.000 --> 01:41:12.000

Cindy Li: And to create metrics at the group levels or at the attribute level to help to help you find out, and you can compare against the baseline threshold. So to help you understand? Okay, so that is this, is this, reaching my threshold in in terms of that.

01:41:13.000 --> 01:41:15.000

Cindy Li: So, and I don't know if I um.

01:41:15.000 --> 01:41:17.000

Cindy Li: If I.

01:41:16.000 --> 01:41:19.000

Saamer Mansoor: Yeah, that was that was really good. Actually, you.

01:41:20.000 --> 01:41:23.000

Saamer Mansoor: Um. The question was pretty high level. Thank you for explaining all that.

01:41:23.000 --> 01:41:25.000

Saamer Mansoor: For everyone to understand as well.

01:41:25.000 --> 01:41:28.000

Saamer Mansoor: I do use.

01:41:28.000 --> 01:41:33.000

Saamer Mansoor: I, I do use on device. AI, I do use a small language model. So so, yeah.

01:41:33.000 --> 01:41:36.000

Saamer Mansoor: Uh, thank you for explaining all of that stuff to them.

01:41:36.000 --> 01:41:40.000

Saamer Mansoor: Uh, that definitely will help people understand the answer better. But yeah, I think that.

01:41:40.000 --> 01:41:44.000

Saamer Mansoor: Um, answers the question earlier on. Thank you so much, Cindy. Um.

01:41:44.000 --> 01:41:48.000

Jutta Treviranus: Yeah. And there's there's quite a bit of interesting work currently going on with.

01:41:48.000 --> 01:41:53.000

Jutta Treviranus: Forms of narrow AI and agent-based systems as well. Yeah.

01:41:54.000 --> 01:42:00.000

Saamer Mansoor: Yes, definitely agentic AI is is definitely taken off. There's a question by Sean, I think, is.

01:42:00.000 --> 01:42:04.000

Saamer Mansoor: Um Lauren, I think he says.

01:42:04.000 --> 01:42:08.000

Saamer Mansoor: I'd like to use AI to determine when to seek 1st response. Care.

01:42:09.000 --> 01:42:11.000

Saamer Mansoor: Sean, could you explain the question a little bit.

01:42:20.000 --> 01:42:24.000

Windsor Hackforge: Well, Shawn, a chance to uh.

01:42:21.000 --> 01:42:23.000

Saamer Mansoor: Shawn. Wait.

01:42:24.000 --> 01:42:26.000

Jutta Treviranus: Go off, mic, yeah, or go on mic.

01:42:26.000 --> 01:42:33.000

Windsor Hackforge: Yeah. So, Sean, you can feel free to unmute yourself or type in your response, whichever you are more comfortable with.

01:42:33.000 --> 01:42:41.000

Windsor Hackforge: Um. In the meantime we had some great feedback from John Mark in here. He 100% agrees on the importance of customer discovery.

01:42:41.000 --> 01:42:51.000

Windsor Hackforge: The challenge with designing products for a wide customer base like accessibility products. Is that what works for one person could actually make things worse for another?

01:42:51.000 --> 01:42:55.000

Windsor Hackforge: I learned this firsthand, thanks to some value feedback from David best.

01:42:55.000 --> 01:42:58.000

Windsor Hackforge: So when it comes to gathering feedback, the more the merrier.

01:42:59.000 --> 01:43:01.000

Jutta Treviranus: Exactly.

01:42:59.000 --> 01:43:01.000

Windsor Hackforge: I think that's uh that.

01:43:01.000 --> 01:43:03.000

Windsor Hackforge: That's some excellent insight on that one.

01:43:03.000 --> 01:43:08.000

Windsor Hackforge: These are difficult challenges to to overcome.

01:43:08.000 --> 01:43:11.000

Windsor Hackforge: Um so sean.

01:43:11.000 --> 01:43:15.000

Windsor Hackforge: Has responded. He's so. He is kind of building on Pamela's question.

01:43:15.000 --> 01:43:24.000

Windsor Hackforge: Pamela said, what kind of AI tools can we create and use in the workplace to improve accessibility or the accommodation process?

01:43:25.000 --> 01:43:27.000

Windsor Hackforge: So Sean's.

01:43:27.000 --> 01:43:30.000

Windsor Hackforge: Original question related to.

01:43:30.000 --> 01:43:37.000

Windsor Hackforge: Um using AI to determine when to seek 1st response. Care is building upon that original question.

01:43:37.000 --> 01:43:39.000

Windsor Hackforge: From Pamela.

01:43:39.000 --> 01:43:43.000

Windsor Hackforge: So if I'm understanding this um.

01:43:43.000 --> 01:43:45.000

Windsor Hackforge: Sean, you are.

01:43:46.000 --> 01:43:48.000

Windsor Hackforge: Interested in using.

01:43:49.000 --> 01:43:56.000

Windsor Hackforge: AI to help you make the decision of whether you need to call um an ambulance, for example. Yes.

01:44:08.000 --> 01:44:14.000

Windsor Hackforge: Always takes a moment to type that that response. And then we get that awkward silence while.

01:44:14.000 --> 01:44:15.000

Windsor Hackforge: While waiting.

01:44:17.000 --> 01:44:21.000

Windsor Hackforge: Um, for example, or possibly to detect an injury.

01:44:21.000 --> 01:44:23.000

Windsor Hackforge: Hmm.

01:44:24.000 --> 01:44:27.000

Saamer Mansoor: Yeah, I I feel like it's a it's a very generic question, like.

01:44:27.000 --> 01:44:32.000

Saamer Mansoor: Uh, you know. Obviously, there are so many things that you could do. But you can't.

01:44:32.000 --> 01:44:35.000

Saamer Mansoor: Make the final decision, making.

01:44:35.000 --> 01:44:37.000

Saamer Mansoor: You know, just like any.

01:44:37.000 --> 01:44:40.000

Saamer Mansoor: Critical um task. Usually, you.

01:44:40.000 --> 01:44:45.000

Saamer Mansoor: Keep the critical decision making out of the hands of AI.

01:44:45.000 --> 01:44:47.000

Jutta Treviranus: Yeah.

01:44:45.000 --> 01:44:50.000

Saamer Mansoor: But you know you'd obviously use AI to uh to dumb down.

01:44:50.000 --> 01:44:54.000

Saamer Mansoor: Uh some of the statistics, but you would need a lot of like sensors and.

01:44:55.000 --> 01:44:58.000

Saamer Mansoor: Um, you know, tools that could collect that data.

01:44:58.000 --> 01:45:02.000

Jutta Treviranus: Yeah, so, and and this gets to the.

01:45:02.000 --> 01:45:06.000

Jutta Treviranus: The work that we've been doing, looking at iatrogenic death and illness because.

01:45:06.000 --> 01:45:10.000

Jutta Treviranus: It is unfortunately the.

01:45:10.000 --> 01:45:16.000

Jutta Treviranus: Many of the AI-based medical tools which support evidence-based medicine.

01:45:16.000 --> 01:45:21.000

Jutta Treviranus: Are, and in looking at the patterns.

01:45:21.000 --> 01:45:29.000

Jutta Treviranus: The issue with iatrogenic death and illness actually occurred before AI was used so pervasively.

01:45:29.000 --> 01:45:34.000

Jutta Treviranus: Um. The more you have evidence-based medicine where doctors are use are.

01:45:34.000 --> 01:45:40.000

Jutta Treviranus: Basing their decisions regarding what to prescribe on larger data sets.

01:45:40.000 --> 01:45:48.000

Jutta Treviranus: And not on the individual in front of them there was a greater preponderance of.

01:45:48.000 --> 01:45:55.000

Jutta Treviranus: Death and illness for people who weren't unlike the average. But AI. And then.

01:45:55.000 --> 01:46:01.000

Jutta Treviranus: Insurance companies that are saying they won't find fund anything that isn't based on.

01:46:01.000 --> 01:46:09.000

Jutta Treviranus: Medical calculator data are actually intensifying that. So the the point that Samer makes regarding.

01:46:09.000 --> 01:46:14.000

Jutta Treviranus: Human in the loop. Human judgment over the loop and.

01:46:14.000 --> 01:46:22.000

Jutta Treviranus: Is, is a really really critical one, especially if you're trying to make a decision about somebody that is very different from average.

01:46:22.000 --> 01:46:28.000

Jutta Treviranus: So what might not look like a critical situation for someone.

01:46:28.000 --> 01:46:36.000

Jutta Treviranus: That doesn't say have a chronic disability may, in fact, be something that is.

01:46:37.000 --> 01:46:49.000

Jutta Treviranus: Something that I so get to know the person. The individual themselves, and their judgment is is a really critical thing. Don't rely on the AI.

01:46:49.000 --> 01:46:51.000

Jutta Treviranus: For.

01:46:51.000 --> 01:46:54.000

Jutta Treviranus: Various things so David best.

01:46:54.000 --> 01:47:02.000

Jutta Treviranus: Yeah, using a AI alert bracelets. Yes, that may be. And in fact, somebody that's a great suggestion.

01:47:02.000 --> 01:47:07.000

Jutta Treviranus: David, that, hey? Don't! Don't make a decision about me, because I'm not like.

01:47:07.000 --> 01:47:12.000

Jutta Treviranus: The average that the AI will assume.

01:47:12.000 --> 01:47:16.000

Jutta Treviranus: I think that might be something that we should do.

01:47:20.000 --> 01:47:27.000

Windsor Hackforge: So Sean is agreeing that an operator is very much required for human feedback. And mark. Yes, please.

01:47:27.000 --> 01:47:30.000

Windsor Hackforge: Feel free to unmute yourself and ask your question.

01:47:32.000 --> 01:47:40.000

Mark Weiler: Thank you. Um. So I'm a librarian. And one thing I recognize is that at the margin of the Starburst is a very small.

01:47:40.000 --> 01:47:43.000

Mark Weiler: Portion of the population whose input.

01:47:43.000 --> 01:47:45.000

Mark Weiler: Is actually needed in multiple places.

01:47:45.000 --> 01:47:47.000

Jutta Treviranus: Mhm.

01:47:45.000 --> 01:47:49.000

Mark Weiler: Uh. So one of the things I think we do is we create standards.

01:47:49.000 --> 01:47:51.000

Mark Weiler: Publish the standards, to guide.

01:47:52.000 --> 01:47:55.000

Mark Weiler: Activity in all the different variety of places. It needs to be.

01:47:56.000 --> 01:48:00.000

Mark Weiler: But as a librarian I also observe how standards can be very expensive.

01:48:00.000 --> 01:48:02.000

Mark Weiler: And I'm looking at one. Um.

01:48:03.000 --> 01:48:07.000

Mark Weiler: Tourism and accessible tourism for all. It's an Iso standard.

01:48:07.000 --> 01:48:14.000

Mark Weiler: It's 221 Swiss francs, which I think is about $360 for 81 pages.

01:48:15.000 --> 01:48:20.000

Mark Weiler: So I'm just wondering you to if you can comment on the openness of the standards publishing ecosystem.

01:48:20.000 --> 01:48:24.000

Mark Weiler: And are there initiatives to ensure that standard documents are open.

01:48:20.000 --> 01:48:22.000

Jutta Treviranus: Yeah.

01:48:24.000 --> 01:48:29.000

Mark Weiler: And accessible for people with disabilities, so that they can read that the documents that.

01:48:29.000 --> 01:48:31.000

Mark Weiler: Are saying, how.

01:48:31.000 --> 01:48:33.000

Mark Weiler: Their lives should be structured.

01:48:33.000 --> 01:48:37.000

Jutta Treviranus: This has been a lifelong battle that we have had.

01:48:38.000 --> 01:48:40.000

Jutta Treviranus: We have I um?

01:48:41.000 --> 01:48:46.000

Jutta Treviranus: Yeah, um, unfortunately, I. So I see.

01:48:46.000 --> 01:48:55.000

Jutta Treviranus: Csa. All of the major international national standards are not all of them, but the majority of them.

01:48:55.000 --> 01:48:59.000

Jutta Treviranus: Have a paywall, and they are not only are they.

01:49:00.000 --> 01:49:02.000

Jutta Treviranus: Do you have to pay for them.

01:49:02.000 --> 01:49:05.000

Jutta Treviranus: But um, also the the.

01:49:06.000 --> 01:49:08.000

Jutta Treviranus: Uh supposedly.

01:49:08.000 --> 01:49:10.000

Jutta Treviranus: You can.

01:49:10.000 --> 01:49:16.000

Jutta Treviranus: Get input from your constituency. But if you dare to show the draft.

01:49:16.000 --> 01:49:23.000

Jutta Treviranus: To your constituency, then you're in trouble as well. So I agree with you, Mara.

01:49:23.000 --> 01:49:34.000

Jutta Treviranus: Luckily accessible standards. Canada is committed to open and free standards, and they are actually pushing other countries that wish to.

01:49:34.000 --> 01:49:40.000

Jutta Treviranus: Participate and collaborate like the EU, like Sen Senelik, like.

01:49:40.000 --> 01:49:42.000

Jutta Treviranus: Etsy, and Iso.

01:49:42.000 --> 01:49:51.000

Jutta Treviranus: And and the various and even BSI to. If you're going to work with us, this has to remain open, and it has to remain free.

01:49:51.000 --> 01:49:53.000

Jutta Treviranus: Which is really great, so.

01:49:53.000 --> 01:49:59.000

Jutta Treviranus: Tell them that you that you support that, so they they keep to that.

01:49:59.000 --> 01:50:05.000

Jutta Treviranus: W. 3 C. Has, of course, made their their standards free and open as well.

01:50:05.000 --> 01:50:12.000

Jutta Treviranus: But our all standards with us project. What we're trying to do is we're trying to push the accessibility wedge.

01:50:12.000 --> 01:50:15.000

Jutta Treviranus: In to say.

01:50:15.000 --> 01:50:24.000

Jutta Treviranus: That anything to do with accessibility should should not be charged. I actually was able to.

01:50:24.000 --> 01:50:29.000

Jutta Treviranus: Assert that with a standard that we worked on a while ago with Iso called.

01:50:30.000 --> 01:50:36.000

Jutta Treviranus: Um access for all. But but what happened there was they did.

01:50:36.000 --> 01:50:38.000

Jutta Treviranus: Provided as a public.

01:50:38.000 --> 01:50:52.000

Jutta Treviranus: Standard, but then they still sold it on their their system, so that they, if you searched for it, you would be directed to their main site, and there you would again be charged for it. So it's a bit of an uphill battle.

01:50:52.000 --> 01:51:00.000

Jutta Treviranus: But I think that is something to advocate, for that things remain free and open, and luckily.

01:51:00.000 --> 01:51:03.000

Jutta Treviranus: Asc. Is doing that and pushing other.

01:51:04.000 --> 01:51:08.000

Jutta Treviranus: Countries and also international standards to do that.

01:51:14.000 --> 01:51:24.000

Windsor Hackforge: That was a great question. Thank you, Mark, for that one. That was part of our discussion last night as well. When we were reviewing the the draft standard. So it's excellent to see.

01:51:23.000 --> 01:51:31.000

Saamer Mansoor: Yeah, I was. I was literally about to bring up. I was. It was in my notes. It was the last I was about to bring up what Mark said. It's a really good point.

01:51:31.000 --> 01:51:35.000

Windsor Hackforge: Yes, love it so. Thank you, Mark, for attending um.

01:51:35.000 --> 01:51:37.000

Windsor Hackforge: Both parts of.

01:51:37.000 --> 01:51:41.000

Windsor Hackforge: Of this topic. We we appreciate having you having you here.

01:51:41.000 --> 01:51:45.000

Windsor Hackforge: So we are down to our final 2 min. So.

01:51:46.000 --> 01:51:53.000

Windsor Hackforge: We will put out one last call for questions, type them in the chat while I kind of do the sign off part of things.

01:51:53.000 --> 01:51:55.000

Windsor Hackforge: And then um.

01:51:55.000 --> 01:52:03.000

Windsor Hackforge: We'll kind of take it from there. So we did have a question in the chat earlier that was just asking if transcripts would be available.

01:52:03.000 --> 01:52:07.000

Windsor Hackforge: So. Yes, that is the plan. Um.

01:52:07.000 --> 01:52:13.000

Windsor Hackforge: Early next week on our website, which is hackf.org, I'll put that in the chat as well.

01:52:13.000 --> 01:52:24.000

Windsor Hackforge: We will be having slides, recordings, handouts from all of our virtual events that happened over the last week, so that will include.

01:52:24.000 --> 01:52:35.000

Windsor Hackforge: This one here unless we've got um one of our presenters who's like you know what? No, let's not share that one which is valid if either of you would prefer. We don't share the recording. We do not have to.

01:52:35.000 --> 01:52:38.000

Windsor Hackforge: Um. We will share it publicly at least.

01:52:38.000 --> 01:52:44.000

Windsor Hackforge: So yes, keep an eye out. You'll be able to access resources from everything that we did this week.

01:52:44.000 --> 01:52:46.000

Windsor Hackforge: Very happy to have that out there, for everyone.

01:52:46.000 --> 01:52:54.000

Windsor Hackforge: Um. We'll also be including that in our newsletter next month. So if you already subscribe to that, and you won't remember to check the website.

01:52:54.000 --> 01:53:00.000

Windsor Hackforge: That's another option uh. You can also sign up for that on our site. So I will be putting that link.

01:53:00.000 --> 01:53:13.000

Windsor Hackforge: Um in there, David, saying, Thank you. Thank you, David. We are very happy that you were here, Sean. Thank you for participating. Happy to to have had you um as part of this conversation, as well.

01:53:13.000 --> 01:53:16.000

Windsor Hackforge: Looks like we're not really getting many other questions.

01:53:16.000 --> 01:53:23.000

Windsor Hackforge: So Samer, Drs. Ravenaris, Cindy Lee. Thank you so much for.

01:53:23.000 --> 01:53:26.000

Windsor Hackforge: This event today. This was fantastic. It was.

01:53:27.000 --> 01:53:37.000

Windsor Hackforge: Wild. What I was hearing. I'm not gonna lie. Some of that was way over my head. I am a project manager that is not as heavily on the technical side. Um, but.

01:53:37.000 --> 01:53:45.000

Windsor Hackforge: I still love hearing these things the way I see it. If I understand everything you're talking about, and none of it's new to me. Then why am I here right.

01:53:45.000 --> 01:53:51.000

Windsor Hackforge: So the fact that I didn't understand it, and I will now go and look into some of these things a little bit further.

01:53:51.000 --> 01:53:57.000

Windsor Hackforge: I think is excellent, and I hope that other people who attended today got as much out of it as well.

01:53:57.000 --> 01:54:02.000

Windsor Hackforge: Um, thank you for the work that you're doing. In addition to speaking to us here today, it's just.

01:54:03.000 --> 01:54:05.000

Windsor Hackforge: Amazing that people are.

01:54:06.000 --> 01:54:08.000

Windsor Hackforge: Working on this side of.

01:54:08.000 --> 01:54:13.000

Windsor Hackforge: This new technology. Well, new ish technology. I love that. You mentioned that you were working on AI.

01:54:13.000 --> 01:54:20.000

Windsor Hackforge: Back in the eighties. And people are like, Yeah, but Chat Gpt only came out 2 years ago. What do you mean? You were working on it that long ago. Um!

01:54:20.000 --> 01:54:24.000

Windsor Hackforge: So very cool to, to kind of open up eyes in a number of different ways. Today.

01:54:25.000 --> 01:54:34.000

Windsor Hackforge: So thank you once again. That does put us at the end of our time. But I want to open it up to our presenters. If you have any final words before we close it out.

01:54:34.000 --> 01:54:42.000

Jutta Treviranus: No, just thank you so much, and and please get in touch with us. We'd love your help for advocating for.

01:54:42.000 --> 01:54:55.000

Jutta Treviranus: Helping us with some of our development, and we'd love to share resources and keep you in the loop. We have a community list as well, which maybe um, I can provide that. So when things are posted.

01:54:56.000 --> 01:55:01.000

Jutta Treviranus: And there we have discussions. We have community workshops as well. So.

01:55:02.000 --> 01:55:09.000

Jutta Treviranus: Please come and become involved, and and at least keep updated on on some of these things.

01:55:10.000 --> 01:55:19.000

Windsor Hackforge: Sounds amazing. I know I'm gonna do that for sure. So we'll we'll get the link for that and include it with the rest of the kind of handouts when we post them next week.

01:55:19.000 --> 01:55:24.000

Windsor Hackforge: So thank you everyone once again. Please enjoy the rest of your afternoon.

01:55:24.000 --> 01:55:32.000

Windsor Hackforge: Your weekend all of that for anybody who's local. To Windsor we have one final event for national accessibility. Week.

01:55:32.000 --> 01:55:41.000

Windsor Hackforge: Tomorrow afternoon from 3 to 5 Pm. We will be having a wonderful in-person workshop, facilitated by the fantastic Evelina Basciuska.

01:55:41.000 --> 01:55:46.000

Windsor Hackforge: She will be talking about disability, pride, and.

01:55:46.000 --> 01:55:57.000

Windsor Hackforge: Actionable ways that we can work to improve inclusivity in general. So thank you, John Mark, for being on top of all these links, too. I very much appreciate that.

01:55:57.000 --> 01:56:03.000

Windsor Hackforge: So. Yes, if you're local to Windsor, please consider that event. Like all, it is completely free.

01:56:03.000 --> 01:56:09.000

Windsor Hackforge: So thank you, everyone. Please take care, and don't hesitate to reach out. If you have questions.

01:56:09.000 --> 01:56:11.000

Windsor Hackforge: Take care bye.