

Speakable AI_Final_mixdown

📅 Thu, Nov 14, 2024 1:23PM ⏱ 27:15

SPEAKERS

Intro, Michael Filimowicz, Natalie Dusek, Laura Marks, Milena Droumeva

Intro 00:11

Speakable. Speakable, a podcast for the people.

Milena Droumeva 00:17

Ww

Laura Marks 04:09

So for part of this grant, again, I'm putting together a team with two media scholars and two computer scientists.

Milena Droumeva 04:23

Wow, that's amazing, Laura, I have to ask again my very first question, which is, how, in your trajectory of work, how did you come to this interest in environmentalism and media and from art, right?

Laura Marks 04:39

I'll be delighted to tell you it's a new project. The research is quite new, but it comes out of project I did in 2020, and 2021, on calculating the carbon footprint of streaming video, and that was with a research group of two media scholars like me and two computer engineers here at SFU and we reviewed all the literature, mostly in computer engineering and related fields, on the energy consumption of the internet and of streaming video in particular, and found out that the impact of streaming video is really, really high and so little known.

Laura Marks 05:35

Well, the time from a base of 100 has now increased to about 140% of its original value, and that's rising at about 5% per year, and Pns, an

So yeah, when you look at the whole life cycle, there's a very, very heavy waste and pollution and debt to the earth.

Milena Droumeva 07:33

Yeah. So I was curious about whether AI or some form of automation, algorithmic automation, is becoming to feature into these pipelines, into these platforms, into these infrastructures, and is that part of your work?

Laura Marks 07:54

So to your question now about the environmental impact of of AI. It's, um, it's driving, you know that that 4% and growing that I mentioned is growing really, really fast now, and you've, you've probably read about or heard about the enormous expansion of data centers specifically to serve AI, and it is nuts. You in the States, Microsoft and Alphabet are buying or renovating nuclear power plants in other places.

Laura Marks 08:37

It's a lot to get into, but basically, there's an enormous expansion of data centers, and where they're going to get their electricity, is a very contentious question.

Laura Marks 08:51

I really, I really think that the expansion of data centers and of information, communication technologies as a whole. It's just one of the best examples of rampant capitalist growth that's not sufficiently government regulated, and it's just gonna it's really setting on our planet on fire.

Milena Droumeva 09:34

Given the underlying thread of creativity, my interest with both speakers with how they understand the interplay between art and AI.

Milena Droumeva 09:46

How have your interest evolved then, and how have you arrived at sort of AI?

Michael Filimowicz

my CV, whatever, I've worked in a lot of different media.

M

Michael Filimowicz 10:18

You know, public art, interacting installations and internet art, experimental music, whatever soundtrack, sound design.

M

Michael Filimowicz 10:27

I feel, I guess as one gets older, maybe one just decides to sort of take everything you've done in the past and just like, make a triangle, either make bring it all to one point. Like, just take all that past stuff you've done and just like, bring everything to like, one thing that's how I would, sort of, I'm thinking of how like, where I'm at right now creatively, is like, because with with music, I mean, I've always loved music videos, and when I've taught video, I've always used music videos. I've assigned people to make students make music videos. It's just something that's always can be culturally relevant. It's a way to bring in lots of creativity into into a course, practically like in like an intro video course, you can just focus on the visuals, not worry about the sounds. The sound is the music. So I've always used music videos in all kinds of ways in my courses. So yeah, I've been making music videos for for a few years.

M

Michael Filimowicz 11:18

And then I just jumped on the AI stuff right away. And so I started making my music videos as were the AI is doing the visuals. So I make the music the usual DAW like digital audio workstation way, or with modular synthesis or algorithmic composition, and then the visuals are done with AI. So that's when I started getting into working with AI as an artist? Yeah.

M

Milena Droumeva 11:43

So I'm curious in your work, what do you think about the difference between before you started using AI and after you started using AI in terms of creativity, type of creativity, how you're becoming creative authorship for yourself. And also, how do you transfer that into the classroom? Like, what do you talk to students about?

M

Michael Filimowicz 12:10

So I sometimes describe it as AI, as AI is the rebirth of the death of the author. That's how I kind of think of it, because it's it's all those, like, death of the author themes, where you're, it's not original to you. You're, you're, you know, manipulating a semiotic field that's actually manipulating you instead. There's no originality, and there's no author, and it's, it's this collective field of meaning and so on and, I'm okay with that. I got to me, to me, it's it's like, oh, yeah, just like the 90s, like all that post structuralist theory I was doing. It's like, that's what AI is.

Michael Filimowicz 15:58

And that that is, I think you know that that is something that you can and that's I miss. I think I go and because when I'm making AI, using AI to make art, I'm not thinking about, am I gonna put my signature on it? Like, this is by Michael. I'm like, Does this reflect, you know, my esthetic vision, my values, my sense of, you know, cultural history. Am I? Am I balancing these elements right? Should I? Should I add the word cura, escura into my prompt to get a nicer lighting like, so, you know, to me, it's a way to express your education and art history and art theory, and that's all there, like, that's, that's to me, that that doesn't go away. And the only, the only thing different, is that maybe I, you know, I can't stamp my name on it as much.

Milena Droumeva 16:40

How do you, how do you sort of introduce that into the classroom with your students works, for example, I know you that's really, that's really interesting, that you talk to them about copyright. I think that's really an important perspective, that in our programs, generally, they don't get a lot of talk about policy. But yeah, when you give them assignments, you know, how do you scaffold that? How do you talk to them about that?

Michael Filimowicz 17:07

The other thing too is I, well, with my, I have this, I redesigned my photography course. Now it's called digital photography. Now it's called Digital, Virtual and AI photography. And the AI there is really to get the students to. It's a way of integrating the ideas from the lectures and readings into the AI. So it's a pedagogical tool, mainly. So if I talk about exposure or lens types or dead pan photography, take those ideas from the lecture and then do it in your prompt writing. So the prompt writing becomes a way of revisiting a course content. So I use the AI strictly pedagogically, but the point is for them to actually do the prompts. Okay, in this image, I have a lens. It's 50 millimeters, you know, fast exposure. You know, fast, fall off, whatever.

Michael Filimowicz 18:04

I use AI a lot personally, but then I share how I use AI with students, just to present, not, you know, the a model of this, or some models so like, these are some ways you can use it e mu



generation, AI, uses a humongous, humongous amount of electricity.

Laura Marks 21:38

Image generation uses 750 times as much electricity as a text classification AI for a single task. So it is a worry if lots of artists start just using AI to generate images. But there are, you know, for art and for other uses, really mostly for other uses. There are not only large language models, but there are small language models that don't have as many parameters, don't require as many passes to train the AI so they use less energy. And something that my research group is planning to do in the next few months is create a tiny language model, so it's going to use very few parameters. It's going to be very efficient. And then we're hoping to incorporate it into the Small File Media Festival and invite artists to submit artworks made with a tiny language model. So they're probably going to be a little more abstract, a little a little more minimalist than things made with large language models.

Laura Marks 23:08 about the awareness with lar

You know, they can be example. So when we when we share our research, we'll say, Hey, look at all the great ways to make art that includes a generative element, but can still be mindful about its environmental impact And the elegant and beautiful. So it's about awareness.

Milena Droumeva 23:4 ile ê S q

No, I, you know, I have, I have, I have crazy ideas like, um, you know, I feel like all of our computer lab should have, like, those giant Frankenstein switches on the walls where we can just turn off the internet and just say, like, have little sparks flying off of it, and you just like, okay, haha, you all cannot use the internet now, right with your fingers, right?

Michael Filimowicz 25:13

So, or we have the whole mountain here, we could do like, boot camps in the woods where there's no cell signal, and make them write on paper. So I sometimes feel like we could probably use, like, internet free zones and actually make them do live writing, live thinking, live talking. We're not gonna be staring at your cell phone screen and like, you know those, I don't know how practical that would be like across 30,000 students, but you know, finding ways to get them do, to do some unenhanced writing and thinking for sure, like in your presence is not gonna hurt anything.

Milena Droumeva 25:48

Maybe it's about the variety, right? Like kind of alternating these modes, stimulating different parts of the brain, different skill sets, different tactilities.

Milena Droumeva 25:56

And there we have it, two sides of the coin, generative AI as standing on shoulders of giants. Prompt writing as art as itself, an expression of creativity and knowledge, and on the other hand, the media geology of computing, the environmental cost to this mediation. Join us for more topics on AI in the future.



26:44

This has been an episode of Speakable. Speakable is also broadcast live on cjsf, SFU's campus cñ