

# Rethinking the Inevitability of AI: The Environmental and Social Impacts of Computing in Historical Context

July 18, 2024

(Presenters and registered attendees will receive zoom link the week before the conference.)

Conference time zone is EDT (UTC-4): <https://time.is/Charlottesville>

Attendees who are not listed on the program can register to attend here:

<https://uva.theopenscholar.com/rethinking-the-inevitability-of-ai/faq>

## **Conference schedule:**

9:00 am - 10:30 am EDT (UTC-4)

### **Opening Remarks and Keynote**

**Keynote Speaker: Dr. Mél Hogan, Queen's University, Ontario, Canada**

**Title: "Datalgia": The pain of datafication (a diagnosis)**

"Solastalgia", coined by the Australian philosopher Glenn Albrecht, refers to the psychological and existential distress caused by environmental change and the loss of the lived relationship between people and their home environment. It captures the sense of desolation, disorientation, and melancholy that can arise when one's familiar landscape is transformed or degraded, severing the deep bonds that connect people to place. Riffing off of this concept, I propose the neologism "datalgia" which can be understood as the distress, alienation, and sense of displacement that emerges when our understanding and experience of the natural world becomes increasingly mediated and abstracted through data, algorithms, and computational simulations. It speaks to the psycho-existential discomfort that arises from the growing rift between our embodied experiences of the living world and the disembodied quantified representations produced by generative AI and other data-driven technologies. As the living world becomes increasingly rendered into data points, algorithms, and virtual simulations, the sensory experiences, cultural meanings, and emotional resonances that have always shaped our relationships with the natural environment are obscured and increasingly made obsolete.

It's not sufficient to understand datalgia, I argue that we must feel it, too. I'll show how datalgia feels through a set of examples, like Earth-2: NVIDIA's Planet Digital Twin, Glue Society's Earth Black Box in Tasmania, and the NCAR-Wyoming Supercomputing Center in Wyoming.

**Bio:** Mél Hogan is the host of *The Data Fix* podcast, the Director of the Environmental Media Lab (EML), and Associate Professor in the Department of Film & Media at Queen's University (Kingston, On). Her research focuses on data infrastructure, extractive AI, and genomic media -- each understood from within the contexts of planetary catastrophe and collective anxieties about the future. <http://melhogan.com>

**Discussant: Dr. Lauren Bridges, University of Virginia, USA**

**Bio:** Lauren Bridges is an (incoming) Assistant Professor in the Department of Media Studies at the University of Virginia and a 2023-2024 fellow at the Berkman Klein Center for Internet & Society at Harvard University. She researches the sociotechnical, political economic, and environmental politics of digital infrastructures.

10:30 am - 11:30 am

**Panel 1: Europe and AI's History**

**Chair: Erik Linstrum, University of Virginia, USA**

1. "Non-Artificial Intelligence, Soviet Cybernetic Pedagogies, and the Limits of Transformative Technocratic Projects" Ksenia Tatarchenko, Singapore Management University
2. "The Power of Data: When Section 1050 Stopped Computers" Lina Rahm, KTH Royal Institute of Technology, Stockholm, Sweden
3. "Sreda Theory: Cautionary Tales from Soviet AI Environments" Benjamin Peters, University of Tulsa, Oklahoma, USA

11:30 am - 12:30 pm

**Panel 2: Geographies of Data Centers**

**Chair: Mél Hogan, Queen's University, Ontario, Canada**

1. "Understanding Ethical Concerns for AI in Disaster Risk Modeling: A Historical and Infrastructural Analysis" Shreyasha Paudel, University of Toronto and Robert Soden, University of Toronto, Canada
2. "AI, on the Cloud" Ali Fard, University of Virginia, USA
3. "Do our cities need AI? Addressing the local impact of urban computing in a global context" Jess Reia, University of Virginia, USA

**12:30 pm - 1:30 pm "Lunch" Break**

**Open Meetup Room for Lunch: Feel free to use the zoom room(s) to chat with fellow conference members over lunch or whatever's the relevant meal in your time zone. Come and go as you please, stay for all, part, or none!**

1:30 pm - 2:30 pm

**Panel 3: International Energy Consumption**

**Chair: Jess Reia, University of Virginia, USA**

1. "Empty Sustainable Promises: Big Tech's Environmental Policies as a Fetishization of Metrics and Indicators" Photini Vrikki, University College London, UK

2. "Contesting the Data/Energy Nexus in Ireland" Patrick Brodie, University College Dublin and Patrick Bresnihan, Maynooth University, Ireland

3. "The Real power of AI, telecoms and computing" Henrik Rood, Stratix, Netherlands

**2:30 pm - 2:45 pm: Short Break for stretching, water, etc.**

2:45 pm - 3:45 pm

**Panel 4: Losing the Forest and the Trees**

**Chair: Joshua Earle, University of Virginia, USA**

1. "Can Resource Conservation be Automated? Learning from FORPLAN and Forest Planning Controversies" Meghan Wiessner, University of Virginia, USA
2. "Google's sustainability projects in Brazil and the platformization of the climate emergency" Carlos D'Andrea, Federal University of Minas Gerais, Brazil
3. "How a computer sees a forest: FORPLAN and the 'optimization' of natural resource management," Nathan Ensmenger, University of Indiana-Bloomington, USA

3:45 pm - 4:45 pm

**Panel 5: Hidden Designs, Hidden Costs**

**Chair: Aaron Martin, University of Virginia, USA**

1. "'To observe suspicious facts in child-life:' the historical roots of AI enthusiasm in child protection services in the UK" Laura Carter, University of Essex
2. "Global Majorities Governed by AI: On Epistemic Boundaries and Extractivist Metaphors" Marco Trigo, University of Massachusetts Amherst, USA and Jose Mari Lanuza, University of Philippines Manila
3. "On AI's Potential for Intellectual Surveillance and Problems of Social Withholding" William Watkins, Boston College, USA

**4:45 pm - 5:00 pm: Short Break for stretching, water, etc.**

5:00 pm - 6:00 pm

**Panel 6: Consumption and Energy in Context**

**Chair: Bryn Seabrook, University of Virginia, USA**

1. “‘Could artificial intelligence save our planet?’ A half-century history of answers” Elli Danae Vartziotis, Zoi Christina Siamanta, Aristotle Tympas, National and Kapodistrian, University of Athens, Greece
2. “Three sides of the same coin: balancing CO2 emissions in sustainable surrogate-based optimisation” Laurens Blik, Eindhoven University of Technology, Netherlands
3. “Water, Data, Barcelona: an investigation into the water uses of the data centres in Cerdanyola del Vallès industrial park” Miranda Gabbot, ELISAVA University

6:00 pm - 7:00 pm

**Panel 7: Error Codes**

**Chair: Mar Hicks, University of Virginia, USA**

1. “‘That which we have so long taken for granted’ – placing Y2K in the history of computing infrastructures” Zachary Loeb, Purdue University, USA
2. “Bugs to hallucinations: A history of technology’s fragility and fixes, and what happens when it begins to ‘think’” Thomas Jonte, University of West Florida, USA
3. “Containing AI at the Edge: Rugged Infrastructures and ‘Inhospitable’ Environments” Rachel Plotnick, Indiana University Bloomington, USA

**7:00 pm Concluding Remarks and Conference Close**

**(with time for participants to exchange contact information)**