C3.ai Digital Transformation Institute

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IN THIS ISSUE: AI Governance, Advocating for Artists, Advancing General Robot Brain, Tech for the Tillage, GenAI Expert Voices

MIT Group Releases White Papers on AI Governance

Two C3.ai DTI P.I.s took part in an effort to provide policymakers with expert resources on AI governance. "The framework we put together gives a concrete way of thinking about these things," says **Asuman Ozdaglar**, deputy dean of academics in the MIT Schwarzman College of Computing and head of MIT's EECS Department, who helped oversee the project. **Sendhil Mullainathan** of the University of Chicago served on the project committee.

- Read the story
- See policy briefs

From Fawkes, to Glaze, to Nightshade, According to Ben Zhao

With a serendipitous introduction to a community of artists, DTI cybersecurity P.I. **Ben Zhao**, computer science professor at the University of Chicago, dedicated his team to producing ways to protect original artwork from rampant AI reproduction. Their three inventions – Fawkes, Glaze, and Nightshade, all designed to evade or counter-program AI scraping – have established Zhao as a defender of artists' rights in the era of Generative AI.

- Read more
- Watch presentation

The Global Project to Make a General Robotic Brain

Sergey Levine of UC Berkeley co-authored an article describing how robots from around the world are sharing data on object manipulation to help work towards a general purpose robotic brain. "In 2023, our labs at Google and the University of California, Berkeley came together with 32 other robotics laboratories in North America, Europe, and Asia to undertake the RT-X project, with the goal of assembling data, resources, and code to make general-purpose robots a reality," authors write.

- Read more
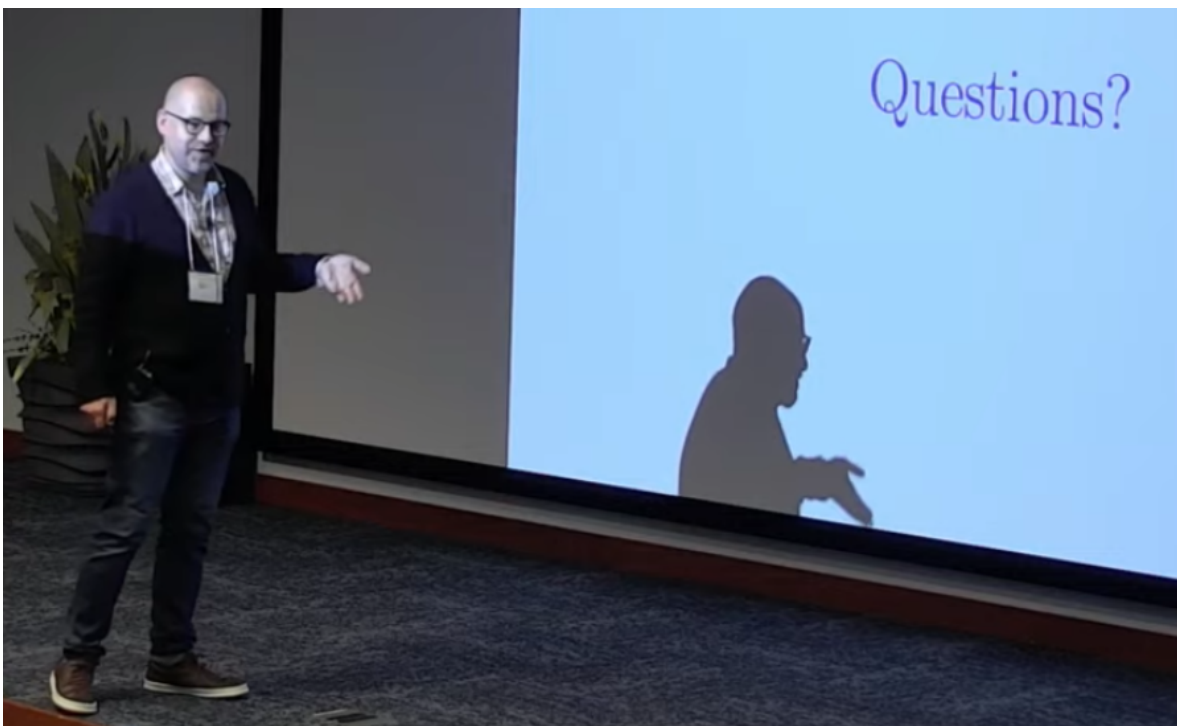
From Ground, to Air, to Space, Tillage Estimates Get Tech Boost

In a new study funded in part by C3.ai DTI, University of Illinois Urbana-Champaign scientists led by **Kaiyu Guan** demonstrate a way to accurately map tilled land in real time by integrating ground, airborne and satellite imagery.

- Read more
- See study

Learn about GenAI from the Experts

Max Raginsky of the University of Illinois Urbana-Champaign (pictured) was one of 18 speakers at the fall C3.ai DTI Workshop on Generative AI. Recordings of all talks are now available online, linked to program descriptions on the DTI website and on the workshop playlist at YouTube.com/@C3DTI.

- See program
- See video playlist

QUICK TAKES

- In a new report, forecasters cite the DTI-backed MIT drug discovery targeting *A. baumannii* to demonstrate the potential of the antibacterial drug market
- Hear CBS News interview DTI P.I. **Zico Kolter** and his CMU colleague on their chatbot "jailbreak" work here
- Two DTI researchers are behind a new startup using ten million patient records to reduce bias in healthcare
- Follow DTI news on X, Facebook, and Linked In

About the C3.ai Digital Transformation Institute

Established in March 2020 by C3.ai, Microsoft, and leading universities, the C3.ai Digital Transformation Institute is a research consortium dedicated to accelerating the socioeconomic benefits of artificial intelligence. The Institute engages the world's leading scientists to conduct research and train practitioners in the new Science of Digital Transformation, which operates at the intersection of artificial intelligence, machine learning, cloud computing, internet of things, big data analytics, organizational behavior, public policy, and ethics. The 10 C3.ai Digital Transformation Institute consortium member universities and laboratories are: University of Illinois Urbana-Champaign; University of California, Berkeley; Carnegie Mellon University; KTH Royal Institute of Technology; Lawrence Berkeley National Laboratory; Massachusetts Institute of Technology; National Center for Supercomputing Applications at University of Illinois Urbana-Champaign; Princeton University; Stanford University; and University of Chicago. Learn more at C3DTI.ai.