

In the Lab



AI tool generates high-quality images faster than state-of-the-art approaches

[Fusing the best of two popular methods for more efficient, on-device image creation.](#)

The Lab group of Song Han has developed a hybrid image-generation tool that uses an autoregressive model to quickly capture the big picture and then a small diffusion model to refine the details of the image.



3 Questions: To catch financial crimes and bad actors

[Lab researchers are developing graph learning methods to detect monetary fraud on huge scales.](#)

Money laundering and credit card fraud results in billions of dollars of losses worldwide and can have other negative downstream impacts. Lab researchers Julian Shun and Yada Zhu are building a transformer-based framework with graph sampling to examine different types of heterogeneous and heterophilic graphs.



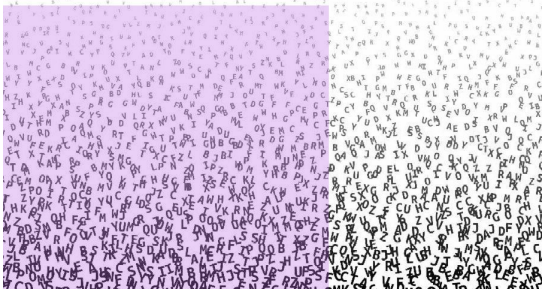
IBM's Mikhail Yurochkin wants to make AI's "cool" factor tangible

[Yurochkin has worked to make AI more inclusive, accessible, and relevant to everyday life.](#)

As a researcher and a mentor with the Lab, Mikhail Yurochkin applies his background in Bayesian modeling to evaluating AI capacities and increasing efficiency. His works include "tiny" benchmarks, LoRAs, and fairness programming.

In the Media

Why do researchers care about small language models?



Unlike large language models, smaller models can work better for more narrowly defined tasks, reports [Quanta Magazine](#). Further, with fewer parameters, their reasoning might be better understood. "If you want to make a new model, you need to try things," said Lab researcher Leshem Choshen. "Small models allow researchers to experiment with lower stakes."

Upcoming Events

AI Snake Oil:
What Artificial Intelligence Can Do, What It Can't, and How to Tell the Difference

April 17, 2025
5:30-6:30 PM
45-230

Arvind Narayanan
Professor of Computer Science
Princeton University

Conversation with Daron Acemoglu

SHAPING THE FUTURE OF WORK

MIT Schwarzman College of Computing

AI Snake Oil with Arvind Narayanan

[The MIT Shaping the Future of Work Initiative and the MIT Schwarzman College of Computing](#)
April 17, 5:30-6:30p.m. ET

During an in-person event, Arvind Narayanan of Princeton University will discuss his latest book, *AI Snake Oil: What Artificial Intelligence Can Do, What It Can't, and How to Tell the Difference*, co-authored with Sayash Kapoor. The presentation will be followed by a [discussion with Daron Acemoglu](#), MIT Institute Professor and Co-Director of the Shaping the Future of Work Initiative, followed by audience Q&A. [Registration required.](#)



MIT Ethics of Computing Research Symposium

[Social and Ethical Responsibilities of Computing](#)

May 1, 9a.m.-5p.m. ET

The Social and Ethical Responsibilities of Computing (SERC) is hosting an in-person extraordinary series of 15 thought-provoking TED-style talks exploring the intersection of technology, ethics, and social responsibility in computing. Through engaging presentations, MIT speakers, including Lab researchers, will explore topics ranging from algorithmic bias and privacy, to the societal impacts of artificial intelligence and the future of human-computer interaction. [Registration required.](#)

Online Learning

[Quantum Computing Fundamentals](#)

An MIT xPRO Course begins
April 7

[Artificial Intelligence in Pharma and Biotech](#)

An MIT Sloan School of Management Course begins
April 9

[Machine Learning in Business](#)

A joint MIT CSAIL and MIT Sloan School of Management Course begins
April 9

[Driving Innovation with Generative AI](#)

An MIT xPRO Course begins
April 14

[Artificial Intelligence in Health Care](#)

A joint MIT Sloan School of Management & MIT Jameel Clinic Course begins
April 23

[Making AI Work: Machine Intelligence for Business and Society](#)

A joint MIT Sloan & Schwarzman College of Computing Executive and Professional Course begins
June 4

[Unsupervised Machine Learning: Unlocking the Potential of Data](#)

A joint MIT Sloan & Schwarzman College of Computing Executive and Professional Course begins
June 11