# Sayash Kapoor

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# EDUCATION

**Princeton University** Doctor of Philosophy in Computer Science; GPA: 3.96/4.00

Indian Institute of Technology Kanpur Bachelor of Technology in Computer Science; GPA: 9.9/10.0

École Polytechnique Fédérale de Lausanne Exchange Student in Computer Science; GPA: 5.7/6.0

# PUBLICATIONS

### [1] AI Snake Oil Arvind Narayanan, Sayash Kapoor Princeton University Press (2024) Peer-reviewed general-audience book on what AI can do, what it can't, and how to tell the difference.

[2] AI Agents That Matter Sayash Kapoor\*, Benedikt Stroebl\*, Zachary S. Siegel, Nitya Nadgir, Arvind Narayanan Preprint (2024)

[3] **REFORMS:** Consensus-based Recommendations for Machine-learning-based Science · Blog post Sayash Kapoor, Emily Cantrell, Kenny Peng, Thanh Hien (Hien) Pham, Christopher A. Bail, Odd Erik Gundersen, Jake M. Hofman, Jessica Hullman, Michael A. Lones, Momin M. Malik, Priyanka Nanayakkara, Russell A. Poldrack, Inioluwa Deborah Raji, Michael Roberts, Matthew J. Salganik, Marta Serra-Garcia, Brandon M. Stewart, Gilles Vandewiele, Arvind Narayanan

Science Advances (2024)

## [4] On the Societal Impact of Open Foundation Models · Blog post

Sayash Kapoor\*, Rishi Bommasani\*, Kevin Klyman, Shayne Longpre, Ashwin Ramaswami, Peter Cihon, Aspen Hopkins, Kevin Bankston, Stella Biderman, Miranda Bogen, Rumman Chowdhury, Alex Engler, Peter Henderson, Yacine Jernite, Seth Lazar, Stefano Maffulli, Alondra Nelson, Joelle Pineau, Aviya Skowron, Dawn Song, Victor Storchan, Daniel Zhang, Daniel E. Ho, Percy Liang, Arvind Narayanan International Conference on Machine Learning (ICML 2024 Oral)

#### $\left| 5 \right|$ A Safe Harbor for AI Evaluation and Red Teaming · Blog post

Shayne Longpre, Sayash Kapoor, Kevin Klyman, Ashwin Ramaswami, Rishi Bommasani, Borhane Blili-Hamelin, Yangsibo Huang, Aviya Skowron, Zheng-Xin Yong, Suhas Kotha, Yi Zeng, Weiyan Shi, Xianjun Yang, Reid Southen Alexander Robey, Patrick Chao, Diyi Yang, Ruoxi Jia, Daniel Kang, Sandy Pentland, Arvind Narayanan, Percy Liang, Peter Henderson

International Conference on Machine Learning (ICML 2024 **Oral**) Our open letter to AI companies calling for a safe harbor was signed by over 350 academics, researchers, and civil society members.

- [6] Promises and pitfalls of artificial intelligence for legal applications · Blog post Sayash Kapoor, Peter Henderson, Arvind Narayanan Journal of Cross-disciplinary Research in Computational Law (2024)
- [7] Against Predictive Optimization: On the Legitimacy of Decision-Making Algorithms that Optimize **Predictive Accuracy** · Blog post Angelina Wang<sup>\*</sup>, Sayash Kapoor<sup>\*</sup>, Solon Barocas, Arvind Narayanan ACM Journal on Responsible Computing (2024) Also presented at: Philosophy, AI, and Society (2023); Data (Re)Makes the World (2023); ACM FAccT (2023)
- [8] Foundation Model Transparency Reports · Blog post Rishi Bommasani, Kevin Klyman, Shayne Longpre, Betty Xiong, Sayash Kapoor, Nestor Maslej, Arvind Narayanan, Percy Liang AIES (2024)

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Princeton, NJ January 2021 -

Kanpur, India July 2015 - June 2019

Lausanne, Switzerland August 2017 - May 2018

- [9] The Responsible Foundation Model Development Cheatsheet: A Review of Tools & Resources Shayne Longpre, Stella Biderman, Alon Albalak, Gabriel Ilharco, Sayash Kapoor, Kevin Klyman, Kyle Lo, Maribeth Rauh, Nay San, Hailey Schoelkopf, Aviya Skowron, Bertie Vidgen, Laura Weidinger, Arvind Narayanan, Victor Sanh, David Adelani, Percy Liang, Rishi Bommasani, Peter Henderson, Sasha Luccioni, Yacine Jernite, Luca Soldaini Preprint (2024)
- [10] Towards a Framework for Openness in Foundation Models: Proceedings from the Columbia Convening on Openness in Artificial Intelligence

Adrien Basdevant, Camille François, Victor Storchan, Kevin Bankston, Ayah Bdeir, Brian Behlendorf, Merouane Debbah, **Sayash Kapoor**, Yann LeCun, Mark Surman, Helen King-Turvey, Nathan Lambert, Stefano Maffulli, Nik Marda, Govind Shivkumar, Justine Tunney Preprint (2024)

- [11] Leakage and the reproducibility crisis in ML-based science Sayash Kapoor, Arvind Narayanan Patterns (2023)
- [12] Considerations for Governing Open Foundation Models · Blog post Rishi Bommasani, Sayash Kapoor, Kevin Klyman, Shayne Longpre, Ashwin Ramaswami, Daniel Zhang, Marietje Schaake, Daniel E. Ho, Arvind Narayanan, Percy Liang Stanford HAI Issue Brief (2023)
- [13] The Foundation Model Transparency Index Rishi Bommasani, Kevin Klyman, Shayne Longpre, Sayash Kapoor, Nestor Maslej, Daniel Zhang, Percy Liang Preprint (2023)
- [14] The limitations of machine learning models for predicting scientific replicability M. J. Crockett, Xuechunzi Bai, Sayash Kapoor, Lisa Messeri, and Arvind Narayanan Proceedings of the National Academy of Sciences (2023)
- [15] How to Prepare for the Deluge of Generative AI on Social Media Sayash Kapoor, Arvind Narayanan Knight First Amendment Institute (2023)
- [16] Weaving Privacy and Power: On the Privacy Practices of Labor Organizers in the U.S. Technology Industry Sayash Kapoor\*, Matthew Sun\*, Mona Wang\*, Klaudia Jaźwińska\*, Elizabeth Anne Watkins\* ACM CSCW (2022) Impact Recognition Award
- [17] The worst of both worlds: A comparative analysis of errors in learning from data in psychology and machine learning Jessica Hullman, Sayash Kapoor, Priyanka Nanayakkara, Andrew Gelman, Arvind Narayanan AIES (2022)
- [18] Controlling polarization in personalization: an algorithmic framework L. Elisa Celis, Sayash Kapoor, Farnood Salehi, and Nisheeth K. Vishnoi ACM FAccT 2019 Best Paper Award
- [19] Corruption-tolerant bandit learning Sayash Kapoor, Kumar Kshitij Patel, and Purushottam Kar Machine Learning (2019)
- [20] A dashboard for controlling polarization in personalization
  L. Elisa Celis, Sayash Kapoor, Vijay Keswani, Farnood Salehi, and Nisheeth K. Vishnoi AI Communications (2019)
- [21] Balanced news using constrained bandit-based personalization Sayash Kapoor, Vijay Keswani, Nisheeth K. Vishnoi, and L. Elisa Celis IJCAI Demos Track (2018)

# PUBLIC WRITING

In addition to the texts below, I write extensively on the AI Snake Oil newsletter, which has over 27,000 subscribers as of May 2024.

- [1] Is AI too dangerous to release openly? Sayash Kapoor, Arvind Narayanan Princeton Engineering Magazine (2024)
- [2] A Safe Harbor for AI Evaluation and Red Teaming Shayne Longpre, Sayash Kapoor, Kevin Klyman, et al. Knight First Amendment Institute (2024)
- [3] Does AI Pose an Existential Risk to Humanity? Two Sides Square Off Arvind Narayanan, Sayash Kapoor The Wall Street Journal, November 2023
- [4] How to report better on artificial intelligence Sayash Kapoor, Hilke Schellmann, Ari Sen Columbia Journalism Review (2023)
- [5] Generative AI companies must publish transparency reports Arvind Narayanan, Sayash Kapoor Knight First Amendment Institute (2023)
- [6] A Checklist of Eighteen Pitfalls in AI Journalism Sayash Kapoor, Arvind Narayanan Reporting on artificial intelligence: a handbook for journalism educators, UNESCO (2023)
- [7] The LLaMA is out of the bag. Should we expect a tidal wave of disinformation? Arvind Narayanan, Sayash Kapoor Knight First Amendment Institute (2023)
- [8] Through the Wire Klaudia Jaźwińska, Sayash Kapoor, Matthew Sun, Mona Wang Logic Mag (2022)
- [9] The platform as the city Mac Arboleda, Palak Dudani, Sayash Kapoor, Lorna Xu ACM Interactions Mag (2021)

# Policy Input

[1] A Safe Harbor For AI Researchers: Promoting Safety And Trustworthiness Through Good-Faith Research

Kevin Klyman, **Sayash Kapoor**, Shayne Longpre Federation of American Scientists: Policy memo (2024)

- [2] Reducing harm from deepfakes
  Sayash Kapoor, Arvind Narayanan
  Testimony to the New Jersey Assembly (2024)
- [3] Response to Request for Comment on Dual Use Foundation Artificial Intelligence Models With Widely Available Model Weights

Alondra Nelson, Arvind Narayanan, Caroline Meinhardt, Daniel E. Ho, Daniel Zhang, Dawn Song, Inioluwa Deborah Raji, Kevin Klyman, Marietje Schaake, Mihir Kshirsagar, Percy Liang, Peter Henderson, Rishi Bommasani, Rohini Kosoglu, Rumman Chowdhury, **Sayash Kapoor**, Seth Lazar, Shayne Longpre, Stefano Maffulli, Stella Biderman, Victor Storchan

Submitted to the National Telecommunications and Information Administration (2024)

- [4] Comment to the Copyright Office in Support of a Safe Harbor Exemption for Generative AI Research Kevin Klyman, Shayne Longpre, Sayash Kapoor, Arvind Narayanan, Aleksandra Korolova, Peter Henderson Submitted to the U.S. Copyright Office (2024)
- [5] Beyond the AI hype Sayash Kapoor, Arvind Narayanan Government of Canada's Federal Foresight Network (2024)

- [6] Intro to AI/ML for Regulators Sayash Kapoor, Mihir Kshirsagar Consumer Finance Protection Bureau (2024)
- [7] How to Prepare for the Deluge of Generative AI on Social Media Sayash Kapoor, Arvind Narayanan
   Federal Trade Commission Division of Advertising Practices Tech Speaker Series (2023)
- [8] Considerations for governing open foundation models · Blog post Rishi Bommasani, Sayash Kapoor, Kevin Klyman, Shayne Longpre, Ashwin Ramaswami, Daniel Zhang, Marietje Schaake, Daniel E. Ho, Arvind Narayanan, Percy Liang Stanford HAI Issue Brief (2023)
- [9] The urgent need for accountability in predictive AI Arvind Narayanan, Sayash Kapoor Congressional Forum (2023)
- [10] Three Ideas for Regulating Generative AI · Blog post Rishi Bommasani, Sayash Kapoor, Daniel Zhang, Arvind Narayanan, Percy Liang Submitted to the National Telecommunications and Information Administration (2023)
- [11] CITP Comments on AI Accountability · Blog post Archana Ahlawat, Justin Curl, Sayash Kapoor, Aleksandra Korolova, Mihir Kshirsagar, Surya Mattu, Jakob Mökander, Arvind Narayanan, Matthew J. Salganik Submitted to the National Telecommunications and Information Administration (2023)
- [12] Calling for Investing in Equitable AI Research in Nation's Strategic Plan · Blog post Solon Barocas, Sayash Kapoor, Mihir Kshirsagar, Arvind Narayanan Submitted to the White House Office of Science and Technology Policy (2022)
- [13] National AI Research Infrastructure Needs to Support Independent Evaluation of Performance Claims -Blog post
   Sayash Kapoor, Mihir Kshirsagar, Arvind Narayanan
   Submitted to the White House Office of Science and Technology Policy and National Science Foundation

#### Awards and Recognition

# Laurance S. Rockefeller Graduate Prize Fellowship

#### 2024-25

First computer scientist in 20 years to receive the graduate prize fellowship from Princeton's University Center for Human Values

Featured in the inaugural list: TIME 100 Most Influential People in AI September 2023

Advisory board member, AI Democracy Forum September 2023

Impact Recognition Award, ACM CSCW November 2022

Motorola Gold Medal, IIT Kanpur June 2019

Best Paper Award, ACM FAccT January 2019

First Position, E-summit Startup Contest, IIT Kanpur September 2018

CMMRS 2018, Pre-Doctoral Research School, Max Planck Institute (Saarbrücken) August 2018

Bronze Medal, ACM ICPC SWERC, École Normale Supérieure November 2017 Academic Excellence Award, IIT Kanpur July 2016, July 2017

**Outstanding Freshman Award, IIT Kanpur** March 2016

### Selected Talks

**A Safe Harbor for AI Evaluation and Red Teaming** Federation of American Scientists. Congressional briefing. July 2024.

**AI agents that matter** Meta (Core Applied Sciences). Invited talk. May 2024.

**AI** and disinformation Dutch Ministry of Interior and Kingdom Relations workshop. Invited talk. May 2024.

**On the Societal Impact of Open Foundation Models** Toronto AI Safety group. Invited talk. May 2024.

Understanding and Unlocking AI's Economic Potential World Bank Measuring Development 2024. Panel. May 2024.

Princeton Dialogues in AI Senate AI Caucus. April 2024.

**Princeton Dialogues in AI** House AI Caucus. April 2024.

**On the Societal Impact of Open Foundation Models** Stanford RegLab. Invited talk. April 2024.

**On the Societal Impact of Open Foundation Models** Mechanism Design For Social Good Speaker Series. Invited talk. April 2024.

On the Societal Impact of Open Foundation Models World Innovation, Technology and Services Alliance. Invited talk. March 2024.

Assessing the risks of open models This Week in Machine Learning. Podcast. March 2024.

**On the Societal Impact of Open Foundation Models** Tech Policy Press. Podcast. March 2024.

**On the Societal Impact of Open Foundation Models** Safe Mode. Podcast. March 2024.

Intro to AI/ML for Regulators Consumer Finance Protection Bureau. Invited talk. March 2024.

**On the Societal Impact of Open Foundation Models** Princeton Alignment Reading Group. Invited talk. February 2024.

**Against Predictive Optimization** Cornell University. Guest lecture. February 2024.

**Understanding AI Hype** Symphony AI. Invited talk. February 2024.

Against Predictive Optimization Stanford University Fairness Lunch Speaker Series. Invited talk. February 2024.

**On the Societal Impact of Open Foundation Models** Stanford Workshop on Governance of Open Foundation Models. Panel. February 2024.

#### Beyond the AI hype

Government of Canada's Federal Foresight Network. Panel. March 2024.

How to Prepare for the Deluge of Generative AI on Social Media Federal Trade Commission. Invited talk. December 2023.

Launch of NTIA's Public Consultation Process on Widely Available AI Foundation Model Weights Center for Democracy and Technology. Panel. December 2023.

**Data Governance in the Age of AI** Washington D.C. Panel. December 2023.

National Association of Attorneys General Washington D.C. Panel. November 2023.

**AI** and its hazards for science ScienceWriters Conference, University of Colorado, Boulder. Invited talk. October 2023.

How to detect AI hype Princeton University Press. Invited talk. October 2023.

**Tigers on Strike** Princeton University. Panel. September 2023.

**Responsible and Open Foundation Models** Princeton-Stanford. Workshop organizer and panel moderator. September 2023.

Improving Reproducibility, Trustworthiness and Fairness in Machine Learning ICIAM Minisymposium, Tokyo. Invited talk. August 2023.

**Investigating algorithmic harm: Best practices and hard-learned lessons** Investigative Reporters and Editors, Orlando. Panel. June 2023.

Against Predictive Optimization ACM FAccT, Chicago. Paper talk. June 2023.

**CITP Digital Investigators Conference** Princeton University. Invited talk. May 2023.

Critical voices on AI Birkbeck Institute of Data Analytics. Invited talk. May 2023.

Co-opting AI: Language New York University. Invited talk. April 2023.

Royal Society, UK Reproducibility Network (UKRN) Panel. April 2023.

Data (Re)Makes the World Yale Law School. Panel. April 2023.

Yale Quantum Institute Yale University. Invited talk. March 2023.

**AI for Libraries, Archives, and Museums** Keynote. November 2022.

Institute of Data Science and Artificial Intelligence seminar University of Exeter. Invited talk. November 2022.

**Data Science Institute seminar** Lawrence Livermore National Lab. Invited talk. October 2022.

**5th Annual conference of the Massive Analysis and Quality Control Society** FDA headquarters. Invited talk. September 2022.

Workshop on The Reproducibility Crisis in ML-based Science Princeton University. Opening talk. July 2022.

#### Selected Press

Science has an AI problem. This group says they can fix it. UC San Diego Today, May 2024

Experts call for legal 'safe harbor' so researchers, journalists and artists can evaluate AI tools VentureBeat, March 2024

**Top AI researchers say OpenAI, Meta and more hinder independent evaluations** Washington Post, March 2024

**Researchers, legal experts want AI firms to open up for safety checks** Computer World, March 2024

**Stanford study outlines risks and benefits of open AI models** Axios, March 2024

**A Mistral chills European regulators** Politico, March 2024

What are LLMs, and how are they used in generative AI? Computer World, February 2024

Princeton University's 'AI Snake Oil' authors say generative AI hype has 'spiraled out of control' VentureBeat, August 2023

Computer Science Researchers Call Out AI Hype as 'Snake Oil' Princeton Alumni Weekly, December 2023

**OpenAI's ChatGPT turns one year old; what it did (and didn't do)** Computer World, November 2023

Artificial intelligence is not a silver bullet NPR, December 2023

**AI's Spicy-Mayo Problem** The Atlantic, November 2023

**AI Is Becoming More Powerful—but Also More Secretive** WIRED, October 2023

How Does AI 'Think'? We Are Only Starting to Understand That The Wall Street Journal, October 2023

The world's biggest AI models aren't very transparent The Verge, October 2023

Maybe We Will Finally Learn More About How A.I. Works The New York Times, October 2023

Klobuchar Says AI Regulation Still Possible Before End of Year Bloomberg, October 2023

Why everyone seems to disagree on how to define artificial general intelligence Fast Company, October 2023

**OpenAI Is Human After All: Sharing Is Caring, Researchers Tell Model Developers** The Information, October 2023

How transparent are AI models? Stanford researchers found out Venture Beat, October 2023

Newsletter helped us dissect fake claims about AI in real-time The Indian Express, September 2023

**Prominent AI fairness advocates among Princeton AI luminaries** The Daily Princetonian, September 2023

### **OpenAI Worries About What Its Chatbot Will Say About People's Faces** The New York Times, July 2023

# GPT-4: Is the AI behind ChatGPT getting worse?

New Scientist, July 2023

**Tips for Investigating Algorithm Harm and Avoiding AI Hype** Global Investigative Journalism Network, July 2023

Six tips for better coding with ChatGPT Nature News, June 2023

The White House AI R&D Strategy Offers a Good Start. Here's How to Make It Better Tech Policy Press, May 2023

The AI backlash is here. It's focused on the wrong things Washington Post, April 2023

# What is needed instead of an AI moratorium

Tagesspiegel Background, March 2023

Here are 5 reasons people are dunking on that call for a 6-month A.I. development pause  $\operatorname{Fortune},\operatorname{March}2023$ 

**Sloppy Use of Machine Learning Is Causing a 'Reproducibility Crisis' in Science** WIRED, August 2022

**Could Machine Learning Fuel a Reproducibility Crisis in Science?** Nature, July 2022

# WORK EXPERIENCE

# Facebook

Software Engineer, Integrity

London, UK July 2019 - December 2020

Developed machine learning models to combat Covid-19 misinformation and non-consensual intimate imagery across Facebook and Instagram. Interned from May – August 2018; developed machine learning models to detect and remove child sexual abuse material from the platform.

# Service and Workshops

# Workshop organizer

Responsible and open foundation models (Princeton & Stanford) Over 900 registrations. Video recordings seen over 3,200 times.

# Workshop organizer

The Reproducibility Crisis in ML-based Science (Princeton) Over 1,700 registrations. Video recordings seen over 6,500 times.

Workshop organizer Resistance AI (NeurIPS 2020)

**Program committee member** AIES 2022, FAccT 2022, FAccT 2023, AIES 2024, FAccT 2024

#### Reviewer

Nature, Science Advances, PLoS ONE, JMLR, Patterns, ICML 2022

**CS 5382: Practical Principles for Designing Fair Algorithms** Cornell University. Guest Lecturer. Spring 2024.

## COS 350: Ethics of Computing

Princeton University. Preceptor and teaching assistant. Fall 2023.

### COS 324: Introduction to Machine Learning

Princeton University. Preceptor and teaching assistant. Spring 2023.

### **PHI 543: Machine Learning: A Practical Introduction for Humanists and Social Scientists** Princeton University. Guest Lecturer. Fall 2023.

**SOC 306: Machine Learning with Social Data: Opportunities and Challenges** Princeton University. Guest Lecturer. Spring 2022, Spring 2023.