# 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

Princeton, NJ

January 2021 -

Kanpur, India

July 2015 - June 2019

Lausanne, Switzerland

August 2017 - May 2018

#### **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] 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)

#### [3] 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)

## [4] 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.

[5] Promises and pitfalls of large language models for legal professionals and lay people · Blog post Sayash Kapoor, Peter Henderson, Arvind Narayanan

Journal of Cross-disciplinary Research in Computational Law (2024)

[6] Against Predictive Optimization: On the Legitimacy of Decision-Making Algorithms that Optimize Predictive Accuracy · Blog post

Angelina Wang\*, Sayash Kapoor\*, 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)

#### [7] Foundation Model Transparency Reports · Blog post

Rishi Bommasani, Kevin Klyman, Shayne Longpre, Betty Xiong, **Sayash Kapoor**, Nestor Maslej, Arvind Narayanan, Percy Liang

Preprint (2024)

#### [8] The Foundation Model Development Cheatsheet

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)

# [9] 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)

#### [10] Leakage and the reproducibility crisis in ML-based science

Sayash Kapoor, Arvind Narayanan

Patterns (2023)

# [11] 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)

# [12] The Foundation Model Transparency Index

Rishi Bommasani, Kevin Klyman, Shayne Longpre, **Sayash Kapoor**, Nestor Maslej, Daniel Zhang, Percy Liang Preprint (2023)

#### [13] 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)

#### [14] How to Prepare for the Deluge of Generative AI on Social Media

Sayash Kapoor, Arvind Narayanan

Knight First Amendment Institute (2023)

# [15] 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

# [16] 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)

#### [17] Controlling polarization in personalization: an algorithmic framework

L. Elisa Celis, **Sayash Kapoor**, Farnood Salehi, and Nisheeth K. Vishnoi ACM FAccT 2019 **Best Paper Award** 

#### [18] Corruption-tolerant bandit learning

Sayash Kapoor, Kumar Kshitij Patel, and Purushottam Kar Machine Learning (2019)

#### [19] A dashboard for controlling polarization in personalization

L. Elisa Celis, **Sayash Kapoor**, Vijay Keswani, Farnood Salehi, and Nisheeth K. Vishnoi AI Communications (2019)

#### [20] 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] Reducing harm from deepfakes

Sayash Kapoor, Arvind Narayanan

Testimony to the New Jersey Assembly (2024)

# [2] 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)

# [3] 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)

#### [4] Beyond the AI hype

Sayash Kapoor, Arvind Narayanan

Government of Canada's Federal Foresight Network (2024)

#### [5] Intro to AI/ML for Regulators

Sayash Kapoor, Mihir Kshirsagar

Consumer Finance Protection Bureau (2024)

#### [6] 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)

#### [7] 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)

#### [8] The urgent need for accountability in predictive AI

Arvind Narayanan, Sayash Kapoor

Congressional Forum (2023)

# [9] Three Ideas for Regulating Generative AI $\cdot$ Blog post

Rishi Bommasani, **Sayash Kapoor**, Daniel Zhang, Arvind Narayanan, Percy Liang Submitted to the National Telecommunications and Information Administration (2023)

#### [10] 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)

# [11] 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)

# [12] 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

#### 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

# 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

Fortune, 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 London, UK

Software Engineer, Integrity

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

#### Teaching

#### 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.