# Rajiv Movva

rmovva@berkeley.edu | Webpage | Updated 03/2025 Interests: AI & society, NLP, healthcare, AI for science

## **EDUCATION**

EDUCATION	
University of California, Berkeley Ph.D., Computer Science. Advisor: Emma Pierson.	2024–present
Cornell University Ph.D., Computer Science. Advisor: Emma Pierson. Note: Incomplete; transferred to Berkeley in third year.	2022–2024
Massachusetts Institute of Technology B.S., Computer Science. Minors: Biology; Women's and Gender Studies.	2018–2022
INDUSTRY EXPERIENCE	
Microsoft Research Research Intern, FATE Montréal. Mentors: Su Lin Blodgett, Noura Farra. Evaluating LLMs for automated responsible AI evaluations.	2024
Apple Siri Research Intern. Mentors: Shayne Longpre, Jinhao Lei, Ajay Gupta. Quantization & distillation for efficient BERT inference.	2021
NVIDIA Genomics Intern. Mentor: Avantika Lal. GPU acceleration for single-cell ATAC-seq analysis.	2020
Genesis Therapeutics Research Intern. Mentors: Ben Sklaroff, Evan Feinberg. Graph neural networks for ligand-protein binding prediction.	2019
HONORS	
Digital Life Initiative Doctoral Fellow	2023
Best Findings Paper, Honorable Mention, $ML4H$	2023
NSF Graduate Research Fellow	2022
Best Student Paper, FAccT	2022
Finalist, Hertz Fellowship	2022
Nominee, Rhodes Scholarship  Rogt Paper, Plackbor NIP	2022
Best Paper, BlackboxNLP Finalist, Regeneron Science Talent Search	2020 2018
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#### **PAPERS**

Also see Google Scholar. Asterisks\* denote co-first authorship.

- 12. **Rajiv Movva\***, Kenny Peng\*, Nikhil Garg, Jon Kleinberg, Emma Pierson. Sparse Autoencoders for Hypothesis Generation. *arXiv*, 2025.
- 11. **Rajiv Movva**, Pang Wei Koh, Emma Pierson. Annotation alignment: Comparing LLM and human annotations of conversational safety. *EMNLP* 2024.
- 10. Emma Pierson\*, Divya Shanmugam\*, **Rajiv Movva**\*, Jon Kleinberg\* et al. Using Large Language Models to Promote Health Equity. *NEJM AI*, 2025.
- 9. Divya Shanmugam, Monica Agrawal, **Rajiv Movva**, Irene Y. Chen, Marzyeh Ghassemi, Maia Jacobs, Emma Pierson. Generative AI in Medicine. To appear, *Annual Review of Biomedical Data Science*, 2025.
- 8. **Rajiv Movva**\*, Sidhika Balachandar\*, Kenny Peng\*, Gabriel Agostini\*, Nikhil Garg, Emma Pierson. Topics, Authors, and Institutions in Large Language Model Research: Trends from 17K arXiv Papers. NAACL 2024.
- 7. Rajiv Movva\*, Divya Shanmugam\*, Kaihua Hou, Priya Pathak, John Guttag, Nikhil Garg, Emma Pierson. Coarse race data conceals disparities in clinical risk score performance. *MLHC* 2023; *ML4H* 2023. Honorable Mention, Best Findings Paper, *ML4H*.
- 6. Harini Suresh, Rajiv Movva, Amelia Dogan, Rahul Bhargava, Isadora Cruxên, Ángeles Martinez Cuba, Giulia Taurino, Wonyoung So, Catherine D'Ignazio. Towards Intersectional, Feminist, Participatory ML: A Case Study in Supporting Feminicide Counterdata Collection. FAccT 2022. Best Student Paper.
- 5. **Rajiv Movva\***, Jinhao Lei\*, Shayne Longpre, Ajay Gupta, Chris DuBois. Combining Compressions for Multiplicative Size Scaling on Natural Language Tasks. *COLING* 2022.
- 4. Rajiv Movva, Jason Zhao. Dissecting Lottery Ticket Transformers: Structural and Behavorial Study of Sparse Neural Machine Translation. *BlackboxNLP @ EMNLP 2020*. Best Paper.
- 3. Rajiv Movva, Jonathan Frankle, Michael Carbin. Studying the Consistency and Composability of Lottery Ticket Pruning Masks. *ICLR Workshop on Science and Engineering of Deep Learning* 2021.
- 2. **Rajiv Movva**, Peyton Greenside, Georgi K. Marinov, Surag Nair, Avanti Shrikumar, Anshul Kundaje. Deciphering regulatory DNA sequences and noncoding genetic variants using neural network models of massively parallel reporter assays. *PLoS ONE*, 2019.
- Remzi Celebi, Oliver Bear Don't Walk IV, Rajiv Movva, Semih Alpsoy, Michel Dumontier. In-silico Prediction of Synergistic Anti-Cancer Drug Combinations Using Multi-omics Data. Scientific Reports, 2019.

## OTHER WRITING

- Rajiv Movva. GenAI's Burden of Authenticity. Critical Reflection, Digital Life Initiative, 2024.
- Rajiv Movva, Pang Wei Koh, Emma Pierson. Using unlabeled data to enhance fairness of medical AI. Nature Medicine (News & Views), 2024.

### INVITED TALKS

Using machine learning to increase equity in healthcare	
International Conference on Health Policy Statistics, San Diego, CA	January 2025
Alignment with whom? Goals and challenges for pluralistic AI	
Digital Life Initiative, Cornell Tech	April 2024
Topics, Authors, and Institutions in LLM Research	
Science of Science Journal Club, Cornell University	October 2023
Data Skeptic Podcast	September 2023
SERVICE	
Reviewer, $FAccT$	2023–2025
Reviewer, ACL Rolling Review	2023 – 2025