Benjamin Laufer

Website: bendlaufer.github.io Email: bdl56@cornell.edu Phone: +1-917-628-8880

EDUCATION

Cornell Tech

New York, NY

Ph.D. Candidate in Computing and Information Science

2021 - 2026 (expected)

o Advisors: Helen Nissenbaum, Jon Kleinberg

Princeton University

Princeton, NJ

B.S. in Engineering, Operations Research and Financial Engineering, Cum Laude

2015 - 2019

o Minors: Urban Studies, Environmental Studies

Honors

- Rising Star in MS&E: Stanford program for 'rising stars' in Management Science & Engineering (2024)
- LinkedIn Bowers CIS PhD Fellowship: Full support plus discretionary funding (2023-2024) [link1, link2]
- Meta PhD Fellowship Finalist: Runner-up for a two-year, fully-funded fellowship in Computational Social Science. Over 3200 applicants internationally. (2023) [link]
- **Digital Life Initiative Doctoral Fellowship**: Yearlong discretionary funding for PhD students interested in ethics, politics, and quality of life in digital societies. (2022)
- Fulbright Fellowship Alternate: MSc in computing at Imperial College London, UK (2021)
- Lime Hackathon Winner: 1st place prize in Lime's annual company-wide hackathon. Project entitled "Head First: Real-Time Helmet Detector using Computer Vision" (2020)
- Best Senior Thesis in Urban Studies: Princeton Urban Studies department thesis prize (2019)
- Kenneth H. Condit Graduation Prize: Awarded to a graduating senior at Princeton who has exhibited excellence in leadership, academic achievement and community service (2019) [link]
- Departmental Distinction: Princeton ORFE Honors (2019)
- Sigma Xi: Nominated to the Scientific Research Honors Society upon graduating (2019)
- Fulbright Fellowship, Laos: 1 year full support (2019; declined)
- Princeton SEAS Research Fund: Funding for senior thesis research (2018-2019)
- Parkhurst Research Fund: Funding for senior thesis research (2018-2019)
- Yale Law School Arthur Liman Fellowship: Award supporting a summer internship in the public interest and colloquium attendance (2018) [link]
- Princeton SEAS Research Fund: Funding for junior independent research (2018)
- Princeton Environmental Institute Fellowship: Award for environmental research (2017) [link]
- Princeton International Internship Program: Award for international summer research (2016)

Papers

- Benjamin Laufer, Manish Raghavan, Solon Barocas: "What Constitutes a Less Discriminatory Algorithm?" ACM CSLaw '25 [presentation], earlier versions appeared at NeurIPS RegML and NeurIPS AFME workshops [oral spotlight], 2024.
- Benjamin Laufer, Jon Kleinberg, Hoda Heidari: "Fine-Tuning Games: Bargaining and Adaptation for General-Purpose Models," *The Web Conference 2024* (WWW) [oral spotlight], and on ArXiv.
- Benjamin Laufer, Helen Nissenbaum: "Algorithmic Displacement of Social Trust," *Knight Institute, Symposium and Essay Series on Algorithmic Amplification and Society*, 2023.
- Benjamin Laufer, Jon Kleinberg, Karen Levy, Helen Nissenbaum: "Strategic Evaluation: Subjects, Evaluators, and Society," ACM Conference on Equity and Access in Algorithms, Mechanisms, and Optimization (EAAMO), 2023.
- Benjamin Laufer, Thomas Gilbert, Helen Nissenbaum: "Optimization's Neglected Normative Commitments." *ACM Conference on Fairness, Accountability, and Transparency (FAccT)*, 2023.

- Benjamin Laufer, Manish Raghavan, Solon Barocas: "Are computational interventions to advance fair lending robust to different modeling choices about the nature of lending?" NeurIPS AFT workshop, 2023.
- Benjamin Laufer, Emma Pierson, Nikhil Garg: "End-to-end Auditing for Decision Pipelines." ICML Workshop on Responsible Decision Making in Dynamic Environments (RDMDE), 2022.
- Benjamin Laufer, Niko Grupen: "Collective Obfuscation and Crowdsourcing." KDD MIS2-TrueFact and ICML DisCoML workshops, 2022.
- Benjamin Laufer, Sameer Jain, A. Feder Cooper, Jon Kleinberg, Hoda Heidari: "Four Years of FAccT: A Reflexive, Mixed-Methods Analysis of Research Contributions, Shortcomings, and Future Prospects." ACM Conference on Fairness, Accountability, and Transparency (FAccT), 2022.
- A. Feder Cooper, Emanuel Moss, Benjamin Laufer, Helen Nissenbaum: "Accountability in an Algorithmic Society." ACM Conference on Fairness, Accountability, and Transparency (FAccT), 2022.
- Benjamin Laufer: "Abandoning Criminal Risk and Recidivism: On Dangerous Goals in ML Scoring-Decision Systems." NeurIPS Resistance AI Workshop, 2020.
- Benjamin Laufer: "Compounding Injustice: History and Prediction in Carceral Decision-Making." Undergraduate Thesis, ArXiv, Princeton Mudd Manuscript Library, April 2019.
- Benjamin Laufer: "Data Analytics and Machine Learning for Environmental Protection: Targeting Air Inspections." Junior Research Paper, *Princeton ORFE*, January 2018.

Talks and Events

- Université de Bretagne Occidentale Summer School: Invited speaker, "Social Networks and the Integrity of Democratic Processes," Brest, France, April, 2025.
- NYU Responsible AI Course: Invited lecture, "What Constitutes a Less Discriminatory Algorithm?" New York, NY, February, 2025.
- Simons Collaboration on the Theory of Algorithmic Fairness: Invited participant, New York, NY, February, 2025.
- Inaugural Conference of the International Association for Safe and Ethical AI: Invited participant, 'A game-theoretic model of fine-tuning and its implications for regulating AI' Paris, France, February, 2025.
- Workshop on Defining Holistic Private Data Science for Practice: Invited participant and lightning talk, "Fine-Tuning Games," San Diego, California, January, 2025.
- Meta AI and Society Seminar: Invited talk, "Modeling the Development of ML Applications and their Ethical Implications," Virtual, December, 2024.
- NeurIPS '24: AFME Workshop spotlight oral presentation, "Fundamental Limits in the Search for Less Discriminatory Algorithms—and How to Avoid Them," Vancouver, CA (given virtually), December, 2024.
- Meta Responsible AI Group Visit: Invited talk, "Fine-Tuning Games: Modeling the Ecosystem of AI Application Development," New York, NY, November, 2024.
- Johns Hopkins Berman Institute of Bioethics: Invited participant and travel grant awardee, "AI Ethics and Governance Symposium," Washington, D.C., October, 2024.
- MLESI '24: Invited participant, Machine Learning and Economics Summer Institute, Chicago, IL, August, 2024.
- Cornell Milstein Fellowship Program: Lecture, "Can We Find a Less Discriminatory Algorithm?" July, 2024.
- WALE '24: Invited participant and poster presentation, Workshop on Algorithms, Learning, and Economics, Kefalonia, Greece, June, 2024.
- BIRS Workshop: Invited participant and presenter, "Bridging Prediction and Intervention Problems in the Social Sciences," Banff, British Columbia, Canada, June, 2024.
- WWW '24: Proceedings paper and oral presentation, "Fine-tuning Games: Bargaining and Adaptation for General-Purpose Models," Singapore, Singapore, May, 2024.
- Stanford Management Science & Engineering: Rising stars event, poster and lightning talk, "Fine-tuning Games: Bargaining and Adaptation for General-Purpose Models," Palo Alto, California, April, 2024.
- Simons Collaboration on the Theory of Algorithmic Fairness: Invited participant, New York, NY, February, 2024.
- NYU Center for Data Science (CDS) Seminar: Visit and talk, "Fine-tuning Games: Bargaining and Adaptation for General-Purpose Models," New York, NY, January, 2024.
- Harvard EconCS Seminar: Visit and talk, "Fine-tuning Games: Bargaining and Adaptation for General-Purpose Models," Cambridge, MA, November, 2023. [link]

- MIT AI and Society Group: Visit and talk, "Fine-tuning Games: Bargaining and Adaptation for General-Purpose Models," Cambridge, MA, November, 2023.
- EAAMO '23: Proceedings paper and poster presentation, "Strategic Evaluation," Boston, MA, October, 2023.
- Symposium on Applications of Contextual Integrity: Proceedings talk, "Party's Over: First-Party Surveillance Through the Lens of Contextual Integrity," Toronto, Canada, September, 2023.
- Industria 5.0: Presentation, "Algorithmic Amplification," New York, NY, September, 2023.
- BIRS Workshop: Invited participant, "Contextual Integrity for Differential Privacy" Kelowna, British Columbia, Canada, August, 2023.
- Cornell Milstein Fellowship Program: Lecture, "When is Algorithmic Amplification Problematic?" July, 2023.
- Cornell AI, Policy and Practice: "First-party Surveillance" July, 2023.
- FAccT '23: Proceedings talk, "Optimization's Neglected Normative Commitments," Chicago, IL, June, 2023.
- PLSC: Workshop participant as paper-writer and discussant, "First-Party Surveillance," Boulder, CO, June, 2023.
- Columbia Knight Institute: Symposium entitled 'Optimizing for What? Algorithmic Amplification and Society.' Presenting work, "When is Algorithmic Amplification Wrongful?" New York, NY, April, 2023. [event, video]
- Cornell Digital Life Initiative Seminar: "When is Algorithmic Amplification Wrongful?" New York, NY, March, 2023. [event, video]
- Cornell AI, Policy and Practice: "When is Algorithmic Amplification Wrongful?" February, 2023.
- c3.ai: Workshop on Data, Learning and Markets Workshop, "Disparate Impact over a Sequence of Capacity-Constrained Subset Selections," Poster Session, Champaign, IL, October, 2022. [event]
- EAAMO '22: Queer in AI panel, October, 2022. [event]
- Cornell AI, Policy and Practice: "Accounting for Unforeseeable Machine Learning Harms via Economic Models of Product Liability," October, 2022.
- KDD '22: MIS2-TrueFact Workshop talk, "Collective Obfuscation and Crowdsourcing," August, 2022. [event]
- ICML '22: Workshop on Disinformation Countermeasures and Machine Learning, "Collective Obfuscation and Crowdsourcing," July, 2022. [event]
- ICML '22: Workshop on Responsible Decision-Making in Dynamic Environments, "End-to-end Auditing of Decision Pipelines," July, 2022. [video]
- Economics & Computing: Poster Session, "End-to-end Auditing of Decision Pipelines," July, 2022. [link]
- FAccT '22: Proceedings talk, "Four Years of FAccT: A Reflexive, Mixed-Methods Analysis of Research Contributions, Shortcomings, and Future Prospects," June, 2022. [video]
- Cornell Information Science Colloquium: "Neglected Normative Assumptions in Applied Optimization," April, 2022.
- Cornell Tech Tree Day: "Auditing Efficiency and Equity throughout an Operational Workflow," April, 2022.
- Cornell AI, Policy and Practice: "Crowdsourcing, Allocation, and Equity in NYC Parks Department Policies," April, 2022.
- Cornell Tech Course Lecture: Data Science in the Wild Guest Lecture, "Data Visualization," February, 2022.
- CUNY Experimental Philosophy Group: "On Accountability," November, 2021.
- Cornell AI, Policy and Practice: "Accountable Metrics," November, 2021.
- NeurIPS '20: Workshop on Resistance AI, "Dangerous Goals in ML Scoring-Decision Systems," December 2020. [event]
- **Princeton ORFE Department**: Invited lecture on algorithmic fairness in ORF473-FinTech Lending (prof: Margaret Holen), May 2020.
- Princeton Reunions: "Princeton in Prison: The Petey Greene Tutors" Panel, June 2019.
- Princeton Urban Studies Department: Research Symposium, May 2019.
- High Meadows Environmental Institute: Research Symposium, April 2019.
- Yale Law Public Interest Colloquium: Invited as a fellow, April 2018. [event]

Work Experience

Microsoft Research (MSR)

New York, NY

Research Intern

Jun 2024 - Sep 2024 (4 months)

Lime

Data Scientist II (prev. Data Scientist, Data Analyst Intern)

San Francisco, CA 2019 - 2021 (2 years)

National Center for Access to Justice

New York, NY

Arthur Liman Research Fellow, Yale Law School

New York, NY

U.S. Environmental Protection Agency (EPA)

Data Science Intern

Jun 2017 - Jan 2018 (8 months)

Jun 2018 - Aug 2018 (3 months)

Princeton Plasma Physics Laboratory (PPPL)

Princeton, NJ

 $Research \ Assistant$

Oct 2016 - May 2017 (8 months)

International Water Management Institute Intern

Accra, Ghana

Princeton High School Debate Team

Jun 2016 - Aug 2016 (3 months)

Princeton, New Jersey September 2015 - June 2016 (10 months)

Private Debate Coach

Minneapolis, Minnesota

National Symposium for Debate

Jul 2015 - Aug 2015 (2 months)

Debate Teacher

Service and Volunteering

Academic Conferences and Journals

Program Committee Reviewer

• **FAccT**: 2023, 2024 o **AIES**: 2023, 2024

o CHI: 2023 o **WWW**: 2023

o Journal of Responsible Computing: Reviewer

Cornell University

New York, NY

Information Science Graduate Student Association (ISGSA) and PhDs at Cornell Tech (PACT)

2023-2024

o Faculty Hiring Representative: Elected position; responsible for attending faculty hiring meetings and representing student interests.

Princeton University

Princeton, NJ

Alumni volunteer

2020-present

• Volunteer alumni interviewer: Serve as an interviewer for high school students applying to college.

UCLA COVID Behind Bars Research Group

Los Angeles, CA

Data Science Researcher

2020

o Data reporting for COVID-19 cases in ICE detention facilities: Creating a single location for COVID-19 case and death counts in ICE facilities.

Petey Greene Program

Princeton, NJ

Tutor and Undergraduate President

2016 - 2019 (4 years)

- Bringing Education into Prisons: Tutored inside NJ correctional facilities weekly for four years.
- Undergraduate President: Led the team of 100+ tutors and organized educational programs and trainings for tutors.

Programming Skills

- Languages: Python, SQL, MATLAB, R, Java, C, html, CSS, JS, STATA
- Technologies: AWS, Sagemaker, React, Tableau

References

- Helen Nissenbaum, Professor, Information Science, Cornell Tech: hn288 [at] cornell.edu
- Jon Kleinberg, Professor, Information Science and Computer Science, Cornell University: kleinberg [at] cornell.edu
- Nikhil Garg, Assistant Professor, Operations Research and Information Engineering, Cornell Tech: ngarg [at] cornell.edu
- Miklos Racz, Assistant Professor, Statistics & Data Science, and of Computer Science, Northwestern University: mkracz [at] princeton.edu