

Lily Xu

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lily-x.github.io

ACADEMIC APPOINTMENTS	Columbia University. New York, NY Sun-Wu Assistant Professor Department of Industrial Engineering and Operations Research (IEOR)	starting July 2025
	University of Oxford. Oxford, UK Postdoctoral Research Fellow Leverhulme Centre for Nature Recovery & Department of Economics <i>Mentor: Alex Teytelboym</i>	2024 – 2025
EDUCATION	Harvard University. Cambridge, MA PhD in Computer Science <i>Advisor: Milind Tambe</i> <i>Thesis committee: Dimitris Bertsimas, Yiling Chen, Andrew Davies, Fei Fang</i>	2024
	Dartmouth College. Hanover, NH A.B. with Honors in Computer Science, minor in Spanish <i>Magna cum laude</i>	2018
HONORS	IFAAMAS Victor Lesser Distinguished Dissertation Award Runner-Up	2024
	Siebel Scholar	2024
	<i>Grant awarded for academic excellence and demonstrated leadership.</i>	
	Rising Star in Data Science (UChicago)	2023
	Rising Star in EECS (GATech)	2023
	Rising Star in Management Science and Engineering (Stanford MS&E)	2023
	Google PhD Fellowship	2022
	<i>One of 13 awardees in machine learning globally.</i>	
	INFORMS Doing Good with Good OR Competition Winner	2021
	<i>Recognizes the “most exciting work performed by students in partnership with public and private organizations that yields tangible and beneficial outcomes for individuals, communities, and organizations”.</i>	
AAAI Best Paper Award Runner Up	2021	
<i>3 best papers and 3 runner-ups were selected out of 9,034 submissions and 1,692 accepted papers.</i>		
Harvard University Derek Bok Certificate of Distinction in Teaching	2021	
Certificate of Appreciation from the SMART Partnership	2019	
<i>Recognition for contribution to developing PAWS system.</i>		
Five Citations for Academic Excellence at Dartmouth College	2014 – 2018	
<i>Special distinction rarely awarded by faculty members “for meritorious characteristics not indicated adequately by academic grades”, received across five computer science and Spanish courses.</i>		
Adobe Women-In-Technology Scholarship – Honorable Mention	2017	

PROFESSIONAL

SMART Conservation Partnership.

AI Lead

2022 – present

I work with SMART to effectively integrate AI research into their conservation management activities. The SMART Partnership is the global leader in protected area solutions, consisting of 8 leading conservation NGOs: WWF, WCS, Wildlife Protection Solutions, Frankfurt Zoological Society, ZSL, NC Zoo, Panthera, and Re:wild.

INVERSA.

Scientific Advisor, AI for Invasive Species Management

2025 –

PREPRINTS

** indicates equal contribution*

† indicates undergraduate I advised

(α - β) indicates alphabetical ordering

Generative AI Against Poaching: Latent Composite Flow Matching for Wildlife Conservation

Under review

Lingkai Kong, Haichuan Wang, Charles A. Emogor, Vincent Börsch-Supan, **Lily Xu**, Milind Tambe

Quantifying the causal impact of ranger patrol deterrence on wildlife poaching using machine learning

Under review

Rachel Guo^{†*}, **Lily Xu***, Andrew Perrault, Luke W. Miratrix, Andrew J. Plumptre, Joshua Mabonga, Herbert Kitimbo, Fredrick Wanyama, Simon Nampindo, Milind Tambe, Andrew B. Davies

Artificial Replay: A Meta-Algorithm for Harnessing Historical Data in Bandits

Under review

(α - β) Siddhartha Banerjee, Sean R. Sinclair, Milind Tambe, **Lily Xu**, Christina Lee Yu

Reflections from the Workshop on AI-Assisted Decision Making for Conservation

White paper

Lily Xu*, Esther Rolf*, Sara Beery, Joseph R. Bennett, Tanya Berger-Wolf, Tanya Birch, Elizabeth Bondi-Kelly, Justin Brashares, Melissa Chapman, Anthony Corso, Andrew Davies, Nikhil Garg, Angela Gaylard, Robert Heilmayr, Hannah Kerner, Konstantin Klemmer, Vipin Kumar, Lester Mackey, Claire Monteleoni, Paul Moorcroft, Jonathan Palmer, Andrew Perrault, David Thau, Milind Tambe

PUBLICATIONS
(JOURNALS)

From maps to models: Participation and contestability in the dynamic management of natural resources

Geo (2025)

Caleb Scoville, Razvan Amironesei, **Lily Xu**, Melissa Chapman, Nicholas R. Record, Carl Boettiger

Unlocking the value of ranger-based monitoring for biodiversity conservation and protected area management

Conservation Letters (2025).

Timothy Kuiper, Anthony Dancer, Colin Beale, Arash Ghoddousi, Harriet Ibbett, Laure Joanny, Blessing Kavhu, Aidan Keane, Daniel Makaza, E.J. Milner-Gulland, Jennifer Moore, and **Lily Xu**

Biodiversity monitoring for a just planetary future

Science (2024). Vol. 383, Issue 6678, pp. 34–36.

Melissa Chapman, Benjamin R. Goldstein, Christopher J. Schell, Justin S. Brashares, Neil H. Carter, Diego Ellis-Soto, Hilary Oliva Faxon, Jenny E. Goldstein, Benjamin S. Halpern, Joycelyn Longdon, Kari EA Norman, Dara O'Rourke, Caleb Scoville, **Lily Xu**, Carl Boettiger

Bridging adaptive management and reinforcement learning for more robust decisions

Philosophical Transactions of the Royal Society B (2023). Vol. 378, Issue 1881.

Melissa Chapman, **Lily Xu**, Marcus Lapeyrolerie, Carl Boettiger

PUBLICATIONS
(CONFERENCES)

Reinforcement learning with combinatorial actions for coupled restless bandits

ICLR 2025. 13th International Conference on Learning Representations

Lily Xu, Bryan Wilder, Elias B. Khalil, Milind Tambe

A Bayesian Approach to Online Learning for Contextual Restless Bandits with Applications to Public Health

AAAI 2025. 39th AAAI Conference on Artificial Intelligence

Biyonka Liang, **Lily Xu**, Aparna Taneja, Milind Tambe, Lucas Janson

[Oral Presentation](#)

Optimistic Whittle Index Policy: Online Learning for Restless Bandits

AAAI 2023. 37th AAAI Conference on Artificial Intelligence

Kai Wang*, **Lily Xu***, Aparna Taneja, Milind Tambe

[Oral Presentation](#)

Robust Planning over Restless Groups: Engagement Interventions for a Large-Scale Maternal Telehealth Program

AAAI 2023. 37th AAAI Conference on Artificial Intelligence

Jackson A. Killian*, Arpita Biswas*, **Lily Xu***, Shresth Verma*, Vineet Nair, Aparna Taneja, Aparna Hegde, Neha Madhiwalla, Paula Rodriguez Diaz, Sonja Johnson-Yu, Milind Tambe

Flexible Budgets in Restless Bandits: A Proximal Primal-Dual Algorithm for Efficient Budget Allocation

AAAI 2023. 37th AAAI Conference on Artificial Intelligence

Paula Rodriguez Diaz, Jackson A. Killian, **Lily Xu**, Aparna Taneja, Arun Sai Suggala, Milind Tambe

Restless and Uncertain: Robust Policies for Restless Bandits via Deep Multi-Agent Reinforcement Learning

UAI 2022. 38th Conference on Uncertainty in Artificial Intelligence

Jackson A. Killian, **Lily Xu**, Arpita Biswas, Milind Tambe

Ranked Prioritization of Groups in Combinatorial Bandit Allocation

IJCAI 2022. 31st International Joint Conference on Artificial Intelligence

Lily Xu, Arpita Biswas, Fei Fang, Milind Tambe

Coordinating Followers to Reach Better Equilibria: End-to-End Gradient Descent for Stackelberg Games

AAAI 2022. 36th AAAI Conference on Artificial Intelligence

Kai Wang, **Lily Xu**, Andrew Perrault, Michael K. Reiter, Milind Tambe

Robust Reinforcement Learning Under Minimax Regret for Green Security

UAI 2021. 37th Conference on Uncertainty in Artificial Intelligence

Lily Xu, Andrew Perrault, Fei Fang, Haipeng Chen, Milind Tambe

Oral Presentation

Top 6.17% of submissions

Envisioning Communities: A Participatory Approach Towards AI for Social Good

AIES 2021. 4th AAI/ACM Conference on AI, Ethics, and Society

Elizabeth Bondi*, **Lily Xu***, Diana Acosta-Navas, Jackson A. Killian

Dual-Mandate Patrols: Multi-Armed Bandits for Green Security

AAAI 2021. 35th AAAI Conference on Artificial Intelligence

Lily Xu, Elizabeth Bondi, Fei Fang, Andrew Perrault, Kai Wang, and Milind Tambe

Best Paper Award Runner Up

Top 6 of 1692 accepted papers

Stay Ahead of Poachers: Illegal Wildlife Poaching Prediction and Patrol Planning Under Uncertainty with Field Test Evaluations

ICDE 2020. 36th IEEE International Conference on Data Engineering

Lily Xu*, Shahrzad Gholami*, Sara Mc Carthy, Bistra Dilkina, Andrew Plumptre, Milind Tambe, Rohit Singh, Mustapha Nsubuga, Joshua Mabonga, Margaret Driciru, Fred Wanyama, Aggrey Rwetsiba, Tom Okello, Eric Enyel

PUBLICATIONS
(BOOK CHAPTERS)

Environment, Society, and Machine Learning

Oxford Handbook of the Sociology of Machine Learning (2023)

Caleb Scoville, Hilary Faxon, Melissa Chapman, Samantha Jo Fried, **Lily Xu**, Carl Boettiger, J. Michael Reed, Marcus Lapeyrolerie, Amy Van Scoyoc, Razvan Amironesei

INVITED TALKS

Does not include contributed conference and workshop talks

Major talks underlined

Scheduled

<i>Alphabet.</i> Modeling talk series	2025
<i>Columbia.</i> Ecol., Evol., and Enviro. Biology (E3B) department seminar	Feb 2026
<i>NYU.</i> Technology Management and Innovation department seminar	Dec 2025
<i>Columbia.</i> SIPA Sustainable Development	Nov 2025
<i>INFORMS.</i> Computing Cluster	Oct 2025
<i>Columbia.</i> CS department seminar	Nov 2025
<i>UN ITU.</i> AI for Good series on biodiversity	Oct 2025
<i>MIT.</i> SCC / LIDS, AI4Society Seminar Series	Oct 2025
<i>Climate Change AI.</i>	Oct 2025

Reinforcement learning with combinatorial actions for coupled restless bandits

London Business School. Workshop on Information and Learning (WIL) Jun 2025

Barriers to explainability for sustainability, and a path towards more reliable models

ICLR workshop. XAI4Science: From Understanding Model Behavior to Discovering New Scientific Knowledge Apr 2025

Sequential planning with messy data: RL and restless bandits for maternal health

University of Toronto. Rotman Young Scholar Seminar Aug 2025

London Business School. Management Science and Operations group Jun 2025

University of Oxford. Pandemic Sciences Institute May 2025

Imperial College Business School. Analytics & Operations group May 2025

University of Southern California. Center for AI and Society Mar 2025

INFORMS Annual Meeting. Oct 2024

Conservation management and policy with causal inference and ML

MSOM. London, UK June 2025

Alliance Summer School. Paris, France June 2025

World Bank and Berkeley CEGA. MeasureDev conference April 2025

Oxford. Nuffield College Economics seminar Jan 2025

EIEE. European Inst. on Economics and the Environment, Milan, Italy Nov 2024

Oxford. Institute for Ethics in AI Oct 2024

Oxford. Environmental Economics seminar Oct 2024

University of Maryland. Analytics for Good workshop, Smith School May 2024

Beyond monitoring: Budding possibilities in AI decision-making for nature recovery

RISE Research Institutes of Sweden. Learning Machines Seminar June 2025

University College London. People and Nature Lab May 2025

Wageningen University. Wildlife Ecology and Conservation Group Apr 2025

Columbia (Ecology & Stats dept). AI and Global Change Symposium Feb 2025

Oxford. Oxford Internet Institute Feb 2025

Oxford. Interdisciplinary Centre for Conservation Science Nov 2024

ETH Zürich. AI + Environment Summit, Zürich, Switzerland, *keynote* Oct 2024

National Academies. US Global Change Research Program Sep 2024

Aspen Global Change Institute. AI for Biodiversity workshop, Aspen, CO Jul 2024

Climate Change AI. Summer School Jun 2024

Harvard. CGA Geospatial AI workshop May 2024

Verena Institute. May 2024

Equitech Futures. Apr 2024

High-stakes decisions from low-quality data: AI decision-making for planetary health

University of Belgrade. ICDSST Conference. Belgrade, Serbia, *keynote* May 2025

Oxford Saïd. Business School Nov 2024

GATech. School of Computer Science Feb 2024

Max Planck Institute. MPI-SWS Kaiserslautern Feb 2024

Max Planck / Universität Tübingen. Tübingen AI Center Feb 2024

CMU. Engineering and Public Policy (EPP) Feb 2024

Cornell. Information Science Feb 2024

Cornell. ORIE Feb 2024

<i>Michigan.</i> IOE	Feb 2024
<i>Dartmouth.</i> Thayer School of Engineering	Jan 2024
<i>Columbia.</i> IEOR	Jan 2024
<i>Yale School of Management.</i> Operations group	Jan 2024
<i>Columbia Business School.</i> DRO division	Jan 2024
<i>MIT Sloan.</i> OR/STATS	Jan 2024
<i>Wharton School.</i> OID	Dec 2023
<i>UT Austin McCombs.</i> IROM	Nov 2023
<i>Caltech.</i> FALCON Research Group Seminar	Nov 2023
<i>UChicago.</i> Rising Stars in Data Science	Nov 2023
<i>UC Berkeley.</i> Data Science Toolbox Series	Oct 2023
<i>INFORMS Annual Meeting.</i> ML for Social Good session	Oct 2023
<i>Cornell ORIE.</i> Young Researchers Workshop	Oct 2023
<i>J.P. Morgan.</i> AI Research group	Oct 2023
<i>Stanford MS&E.</i> Rising Stars in MS&E	May 2023

Causal AI and Conservation

<i>ICCB.</i> Int'l Conference on Conservation Biology, Kigali, Rwanda	Jul 2023
<i>Microsoft Research New England.</i> Machine Learning Ideas seminar	Jun 2023
<i>United Nations ITU.</i> AI for Good Summit	Jun 2023
<i>WWF.</i> <u>Fuller Seminar Series on Conservation AI</u>	Apr 2023

Minimax Regret Optimization: Robust Planning for Conservation and Maternal Health

<i>Berkeley MARL.</i> Multi-Agent Learning Seminar	Mar 2023
<i>Brown University.</i> Algorithmic Game Theory group	Mar 2023

Learning and Planning Under Uncertainty for Wildlife Conservation

<i>Harvard Kennedy School.</i> "Leading in AI" Executive Education	Jul 2023
<i>Penn State.</i> CSRAI Young Achievers Symposium	Mar 2023
<i>UC Berkeley.</i> Global Policy Lab	Feb 2023
<i>Centro de Analítica para Políticas Públicas (CAPP).</i> (in Spanish)	Dec 2022
<i>Georgia Tech.</i> ISyE department seminar	Nov 2022
<i>Analytics for a Better World.</i> <u>ABW Webinar Series</u>	Sep 2022
<i>Harvard Kennedy School.</i> "Leading in AI" Executive Education	Jul 2022
<i>UC Berkeley.</i> Ethics and Practices of Algorithmic Conservation	Apr 2022
<i>UCL.</i> Climate Hack AI Competition, <i>keynote</i>	Mar 2022
<i>Harvard University.</i> HCI Colloquium: AI-Assisted Decision-Making	Feb 2022
<i>Pasteur's Quadrant.</i> Seminar Series	Feb 2022
<i>INFORMS.</i> <u>Doing Good with Good OR Finalists</u>	Oct 2021

Ranked Prioritization of Groups in Combinatorial Bandit Allocation

<i>Sony.</i> Computer Science Laboratories (CSL) Paris	Oct 2022
<i>Stanford.</i> Computing & Society group	Oct 2022
<i>INFORMS Annual Meeting.</i> Fairness in Sequential Decision Making	Oct 2022

Envisioning Communities: A Participatory Approach to AI for Social Good

<i>MIT.</i> AI Ethics group	Sep 2022
<i>Women's Forum.</i> Women4AI Daring Circle workshop	Jun 2022

Robust Reinforcement Learning Under Minimax Regret for Green Security

<i>Google Research India.</i> AI for Social Good research group	Jan 2022
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PAWS: AI to Predict and Plan Against Poaching

<i>ICCB</i> . International Congress for Conservation Biology	Dec 2021
<i>IUCN WCC</i> . World Conservation Congress	Sep 2021
<i>WILDLABS</i> . Tech Tutors: Season Three	Sep 2021
<i>AI for Climate</i> . Mexico Talk Series powered by Huawei	Jul 2021
<i>SMART Partnership</i> . International Women's Day Webinar	Mar 2021
<i>WWF</i> . Webinar on SMART	Apr 2020
<i>AI LA</i> . Earth Summit	Apr 2021

Dual-Mandate Patrols: Multi-Armed Bandits for Green Security

<i>Beijing Academy of Artificial Intelligence</i> .	Mar 2021
<i>University College London</i> . AI Society	Feb 2021

INVITED PANELS

<i>Climate Change AI & ETH Future Cities Laboratory</i> . Singapore	Apr 2025
<i>Blue Earth</i> . Blue Earth Summit, London, UK	Oct 2024
<i>ETH AI Center, Switzerland</i> . AI+X Summit, Zürich, Switzerland	Oct 2024
<i>Arthur AI</i> . AI Fest	Sep 2024
<i>Hertz Foundation Workshop</i> . AI Science and Policy, <i>moderator</i> panelists: Jacob Steinhardt, Julie Owono, Jessica Fjeld	Jul 2022
<i>South by Southwest (SXSW)</i> . AI for Wildlife	Mar 2021
<i>Harvard CRCS</i> . AI for Social Impact, <i>moderator</i> panelists: Susan Murphy, Erez Yoeli, Desmond Patton	Mar 2020

GUEST LECTURES

<i>Columbia University</i> . IEOR E4505: Operations Research in Public Policy	Spring 2025
<i>American University of Cairo</i> .	Spring 2025
<i>USC</i> . ISE 625. Analytics for Social Impact	Spring 2025
<i>Oxford</i> . Intelligent Earth PhD course	Winter 2025
<i>NYU Stern</i> . Recent Advances in Data-Driven Decision Making	Fall 2024
<i>Harvard</i> . CS 288. AI for Social Impact	Fall 2024
<i>Harvard</i> . CS 288. AI for Social Impact	Spring 2024
<i>Vanderbilt</i> . CS 5891. AI for Social Impact	Spring 2024
<i>Cornell Tech</i> . CS 6382. Data Science for Social Change	Fall 2023
<i>Cornell Tech</i> . ORIE 5355/INFO 5370. Applied Data Science: Decision-making beyond prediction	Fall 2023
<i>Harvard</i> . CS 182. Artificial Intelligence	Fall 2023
<i>Cornell</i> . INFO 6960. Data Science for Global Development	Spring 2023
<i>MIT</i> . 15 076. Analytics for a Better World	Spring 2023
<i>Harvard</i> . CS 96. Machine Learning for Social Impact	Spring 2023
<i>Wellesley</i> . CS 115. Computing for the Socio-Techno Web	Fall 2022
<i>Ohio State</i> . CSE 3521. Survey of Artificial Intelligence I	Fall 2022
<i>Harvard</i> . CS 288. AI for Social Impact	Fall 2022
<i>University of Southern California</i> . ISE 599. Analytics for Social Impact	Spring 2022
<i>UPenn Wharton</i> . OIDD 941. Recent Advances in Data-Driven Decision-Making	Spring 2022
<i>Harvard</i> . CS 96. Machine Learning for Social Impact	Spring 2022
<i>Cornell Tech</i> . ORIE 5355/INFO 5370. People, Data, Systems	Fall 2021
<i>Harvard Business School</i> . HBSMBA 2231. From Data to Decisions	Fall 2021
<i>Wellesley</i> . CS 115. Computing for the Socio-Techno Web	Fall 2021
<i>Australian National University</i> . CECS8001. Building Cyber-Physical Systems	Fall 2021
<i>University of Pittsburgh</i> . CS 1699. AI for Good: Ethics and Implications	Spring 2021
<i>University of Michigan</i> . SI 431. Algorithms and Society	Spring 2021
<i>Harvard</i> . CS 182. Artificial Intelligence	Fall 2020
<i>Dartmouth</i> . CS 11. Foundations of Applied Computer Science	Spring 2018

WORK
EXPERIENCE

Google Research. India, AI for Social Good lab
Student Researcher

Spring 2022

Google. Seattle, WA
Software Engineering Intern

Summer 2017

Dyn, Inc. Hanover, NH
Data Analytics Research Intern

Spring 2016

STUDENTS ADVISED Hannah Park (UChicago)

Jun 2025 –

At Harvard College

Vincent Börsch-Supan '25 Sep 2022 – Dec 2023

Alejandra Perea Rojas '24 Jun 2022 – Dec 2022

Christopher Ong '23 Spring 2022

April Chen '22 Summer 2021

Adobe Research Women-In-Technology Scholarship Winner

Ezenia Diaz-Lembert '23 Spring 2021

Emilia Cabrera '21 Sep 2020 – Dec 2021

*Thesis: Protecting the Lion's Share: Mitigating Illegal Wildlife Poaching
with Multi-Agent Reinforcement Learning*

Rachel Guo '22 Jun 2020 – May 2023

NCWIT Collegiate Award Winner

CRA Outstanding Undergraduate Researcher Award — Honorable Mention

Harvard Hoopes Prize for Outstanding Thesis

NSF Graduate Research Fellowship

*Thesis: On the Effect of Ranger Patrols on Deterring Poaching: A Bayesian
Approach for Causal Inference Using Field Tests as an Instrument*

Next step: Stanford ICME PhD student

TEACHING
EXPERIENCE

Columbia University

IEOR E8100: Advanced Topics in IEOR Spring 2026

ORCS E4200: Data-Driven Decision Modeling Fall 2025

Harvard University

→ *Head Teaching Fellow*

CS 182: Artificial Intelligence Fall 2020

Harvard Derek Bok Certificate of Distinction in Teaching

Dartmouth College

→ *Teaching Assistant, Department of Computer Science*

CS 11: Foundations of Applied Computer Science, *head TA* Spring 2018

CS 1: Intro to Programming and Computation Spring 2018

CS 1: Intro to Programming and Computation Fall 2017

CS 31: Algorithms Winter 2017

CS 1: Intro to Programming and Computation Spring 2017

CS 10: Object-Oriented Programming Spring 2016

CS 1: Intro to Programming and Computation Winter 2016

CS 1: Intro to Programming and Computation Fall 2015

CS 10: Object-Oriented Programming Spring 2015

→ *Teaching Assistant, Tuck School of Business*

Tuck FWP: Fundamentals of Web Programming Spring 2017

Tuck DSA: Data Structures and Analytics Spring 2017

FUNDING:
PROPOSALS AND
AWARDS

EAAMO Executive Director funding, supported by the Cornell Tech PiTech Faculty
Impact Fellowship. Awarded 2023. (I co-wrote proposal and helped scope position).
Approx \$100,000 in support

Lily Xu. Siebel Scholar, awarded 2023. \$35,000

Lily Xu. Google PhD fellowship, awarded 2022. \$88,029

PROFESSIONAL
SERVICE

EAAMO (Equity and Access in Algorithms, Mechanisms, and Optimization)
formerly Mechanism Design for Social Good (MD4SG)

Nonprofit incorporation and Executive Director recruitment, lead Apr 2023 –
MD4SG/EAAMO Bridges initiative-wide co-organizer Mar 2021 –
*with Charles Cui, Francisco J. Marmolejo Cossío, George Obaido,
Matthew Olckers, and Ana-Andreea Stoica;
previously with Rediet Abebe, Irene Lo, and Wanyi Li*
Working Group on Environment, advisor Apr 2021 –
Community Engagement team, founder and co-lead Oct 2020 – Apr 2021
Working Group on Environment, co-founder and co-organizer Jan 2020 – Apr 2021

Workshop Organization

Organizer, Beyond monitoring: Envisioning opportunities for AI to help inform
conservation decision-making @ Oxford Jun 2025
Co-organizer, Climate Change AI Workshop @ ICLR Apr 2025
Co-organizer, AI-Assisted Decision Making for Conservation Workshop Oct 2022
with Esther Rolf and Milind Tambe
Organizer, SMART/PAWS Workshop. Rio Bravo, Belize Aug 2022
Lead organizer, Harvard CRCS Rising Stars Workshop Mar 2020
Co-organizer, Computational Sustainability Doctoral Consortium Oct 2019
with Priya Donti, Genevieve Flaspohler, Aaron Ferber, and Sebastian Ament

Tutorials

Lead organizer, AI for Social Impact tutorial @ EAAMO Oct 2023
with Emily Aiken, Priya Donti, Nikhil Garg, and Paul Gözl

Panels

Co-organizer and co-moderator. The Future of AI for Social Impact Apr 2022
panelists: Fei Fang, Lynn Kaack, Danaë Metaxa, Bryan Wilder

Conference Event Organization

Poster co-chair, ACM EAAMO'24 Oct 2024
Session co-organizer, WALE workshop Jun 2024
Social co-chair, ACM EAAMO'23 Oct 2023
Social co-chair, ACM EAAMO'22 Oct 2022
Social co-chair, ACM EAAMO'21 Oct 2021
Social co-chair, Fourth Workshop on MD4SG Aug 2020

Seminar Organization

Co-organizer, UN ITU AI for Good series on biodiversity Spring 2025
Co-organizer, Harvard CRCS Social Impact Seminar Series Spring 2022
Co-organizer, Harvard CRCS Rising Stars Speaker Series Apr 2021
Co-organizer, CompSust Open Graduate Seminar (COGS) Spring 2020

REVIEWING
SERVICE

Journal Reviewing

Ambio
Biological Conservation
Computing and Sustainable Societies (JCSS, formerly COMPASS)

Conservation Letters
 Conservation Science and Practice
 Journal of Artificial Intelligence Research (JAIR)
 Operations Research
 Nature Sustainability
 Proceedings of the National Academy of Sciences (PNAS)

Senior Program Committee (Conference meta-reviewing)

AAAI AISI track. AAAI Conference on Artificial Intelligence 2026

Program Committee (Conference reviewing)

→ *Conferences*

AAMAS. Autonomous Agents and Multi-Agent Systems 2025
AIES. Artificial Intelligence, Ethics, and Society 2022, 2023
AAAI. AAAI Conference on Artificial Intelligence 2023
AAAI AISI track. AAAI Conference on Artificial Intelligence 2020, 2021, 2022, 2025
COMPASS. Computing and Sustainable Societies 2021
EAAMO. Equity and Access in Algorithms, Mechanisms, and Optimization 2021, 2022, 2023, 2024
EC. Economics and Computation 2025
FAccT. Fairness, Accountability, and Transparency 2022, 2023, 2025
IAAI. AAAI Innovative Applications of Artificial Intelligence 2023
ICLR. International Conference on Learning Representations 2025
NeurIPS. Neural Information Processing Systems 2023
UAI. Uncertainty in Artificial Intelligence 2023

→ *Workshops*

AI for Wildlife Conservation @ SIGSPATIAL 2023
 Autonomous Agents for Social Good (AASG) @ AAMAS 2021, 2023
 AI for Social Good @ AAAI 2023
 Data-Driven Humanitarian Mapping @ KDD 2020, 2021, 2022
 Regulating Machine Learning @ NeurIPS 2023
 Computational Sustainability @ NeurIPS 2023
 Cooperative AI Workshop @ NeurIPS 2022
 Black in AI Workshop @ NeurIPS 2020, 2021, 2022
 Machine Learning for the Developing World (ML4D) @ NeurIPS 2020, 2021
 Machine Learning for Public Health @ NeurIPS 2021
 Resistance AI @ NeurIPS 2020
 AI for Social Good @ IJCAI 2020
 Mechanism Design for Social Good (MD4SG) 2020
 AI for Social Good @ Harvard CRCS 2020

Competition / Proposal Reviewing Committee

Climate Change AI, Innovation Grants, *Meta-reviewer* 2024
 AI2, EarthRanger Conservation Tech Award 2022, 2023

Reviewer

Deep Learning Indaba 2022
 Caltech Computer Vision for Ecology (CV4Ecology) Summer School 2022
 ICML, *subreviewer* 2021
 NeurIPS, *subreviewer* 2020
 IJCAI Special Track on CompSust and Human Well-being, *subreviewer* 2020
 COMPASS, *subreviewer* 2019
 Bloomberg Data for Good Exchange (D4GX), *subreviewer* 2019

AT COLUMBIA	PhD Committee, IEOR	2025 – 26
	Faculty Search Committee, E3B Dept. - Simons Foundation hire	2025 – 26
	Task Force, AI for Social Good Initiative @ School of Social Work	2025 –
	PhD admissions committee	2025

OUTREACH

Speaking

<i>UMD.</i> Student Sustainability Summit	May 2025
<i>Harvard.</i> CS 290, Navigating grad school, <i>panelist</i>	Nov 2023
<i>Harvard.</i> Tech for Social Good and Harvard Computer Society	Mar 2023
<i>Harvard SEAS.</i> PhD Admitted Students Open House, <i>panelist</i>	Mar 2021
<i>Harvard SEAS.</i> Research Labs Open House	Nov 2020
<i>GirlsComputingLeague.</i> AIInnovation Business Summit	Sep 2020
<i>IEEE Computer Society.</i> Women in Computing, Kerala (India) Chapter	Sep 2020
<i>Data Science Africa.</i> Tutorial on MD4SG and the Environment	Jul 2020
<i>Ledyard Canoe Club.</i> Inclusivity in the Outdoors	Jul 2020
<i>Dartmouth.</i> Women in Computer Science, <i>panelist</i>	May 2020
<i>Harvard SEAS.</i> Diversity, Inclusivity, and Belonging, <i>panelist</i>	May 2020
<i>Center for Initiatives in Jewish Education.</i> High school student visit	Mar 2020
<i>World Science Festival.</i> Science and Storytime	Jun 2019
<i>L.A. Unified School District (LAUSD).</i> African American Family Day	May 2019
<i>Zoo Magnet High School.</i> College and Career Day	Nov 2018

Mentoring

<i>Harvard University.</i> InTouch Peer Mentor	2020 – 2023
<i>Harvard University.</i> Women in STEM Mentor	2019 – 2020
<i>Dartmouth College.</i> Women in Computer Science	2017 – 2018

Volunteering

<i>Harvard SEAS.</i> A Guide to Your PhD	Oct 2020
<i>Harvard University.</i> Project Teach	Apr 2020
<i>Cambridge Public Schools.</i> STEAM It Up!	Oct 2019
<i>Hustle N' Code.</i> Hackathon, <i>technical lead</i>	Dec 2018
<i>Hustle N' Code is a Los Angeles hackathon for youth in public housing.</i>	
<i>My team won first place, and the four students each received a laptop.</i>	

Case Studies

Harvard Business School. SMART: AI and ML for Wildlife Conservation Oct 2022

Podcasts

Ecochat. AI for Conservation - Using Machine Learning to Stop Poaching 2023

Cold Call (Harvard Business School podcast). Can AI and Machine Learning Help Park Rangers Prevent Poaching? 2023

INFORMS Resoundingly Human Podcast. May 2022

Rethinking Economics NL. Disruptive Technologies podcast series. May 2021

Video

Alhub. New Voices in AI: environmental conservation with Lily Xu. Oct 2022

Voice of America (VOA) News. Wildlife Rangers Use AI to Predict Poachers' Next Moves. Jan 2022

Articles

Think Landscape. How AI is transforming conservation Aug 2024

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