Lily Xu

lily.x@columbia.edu
lily-x.github.io

Academic Appointments

Columbia University. New York, NY — starting July 2025
Sun-Wu Assistant Professor
Department of Industrial Engineering and Operations Research (IEOR)

University of Oxford. Oxford, UK — 2024 – 2025
Postdoctoral Research Fellow
Leverhulme Centre for Nature Recovery & Department of Economics
Mentor: Alex Teytelboym

Education

Harvard University. Cambridge, MA — 2024
PhD in Computer Science
Advisor: Milind Tambe
Thesis committee: Dimitris Bertsimas, Yiling Chen, Andrew Davies, Fei Fang

Dartmouth College. Hanover, NH — 2018
A.B. with Honors in Computer Science, minor in Spanish
Magna cum laude

Honors

IFAAMAS Victor Lesser Distinguished Dissertation Award Runner-Up — 2024

Siebel Scholar — 2024
Grant awarded for academic excellence and demonstrated leadership.

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
One of 13 awardees in machine learning globally.

INFORMS Doing Good with Good OR Competition Winner — 2021
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".

AAAI Best Paper Award Runner Up — 2021
3 best papers and 3 runner-ups were selected out of 9,034 submissions and 1,692 accepted papers.

Harvard University Derek Bok Certificate of Distinction in Teaching — 2021

Certificate of Appreciation from the SMART Partnership — 2019
Recognition for contribution to developing PAWS system.

Five Citations for Academic Excellence at Dartmouth College — 2014 – 2018
Special distinction rarely awarded by faculty members "for meritorious characteristics not indicated adequately by academic grades", received across five computer science and Spanish courses.

Adobe Women-In-Technology Scholarship – Honorable Mention — 2017

Non-Profit Service

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.

Preprints

* *indicates equal contribution*
† *indicates undergraduate I advised*
(α–β) *indicates alphabetical ordering*

Beyond the funding gap: A call for more equitable and impactful COP climate and biodiversity finance commitments
Under review

From Maps to Models: Participation and Contestability in the Dynamic Management of Natural Resources
Under review
Caleb Scoville, Razvan Amironesei, **Lily Xu**, Melissa Chapman, Nicholas R. Record, Carl Boettiger

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
Working paper
(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

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Publications (Journals)

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

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Invited Talks

Does not include contributed conference and workshop talks
Major talks underlined

Scheduled

MIT.	SCC / LIDS, AI4Society Seminar Series	Fall 2025
London Business School.	Workshop on Information and Learning (WIL)	Jun 2025
University of Belgrade.	ICDSST Conference. Belgrade, Serbia, *keynote*	May 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 planetary health

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

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

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

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

Causal AI and Conservation

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

Minimax Regret Optimization: Robust Planning for Conservation and Maternal Health

Berkeley MARL. Multi-Agent Learning Seminar — Mar 2023
Brown University. Algorithmic Game Theory group — Mar 2023

Learning and Planning Under Uncertainty for Wildlife Conservation

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

Ranked Prioritization of Groups in Combinatorial Bandit Allocation
Sony. Computer Science Laboratories (CSL) Paris — Oct 2022
Stanford. Computing & Society group — Oct 2022
INFORMS Annual Meeting. Fairness in Sequential Decision Making — Oct 2022

Envisioning Communities: A Participatory Approach to AI for Social Good
MIT. AI Ethics group — Sep 2022
Women's Forum. Women4AI Daring Circle workshop — Jun 2022

Robust Reinforcement Learning Under Minimax Regret for Green Security
Google Research India. AI for Social Good research group — Jan 2022

PAWS: AI to Predict and Plan Against Poaching
ICCB. International Congress for Conservation Biology — Dec 2021
IUCN WCC. World Conservation Congress — Sep 2021
WILDLABS. Tech Tutors: Season Three — Sep 2021
AI for Climate. Mexico Talk Series powered by Huawei — Jul 2021
SMART Partnership. International Women's Day Webinar — Mar 2021
WWF. Webinar on SMART — Apr 2020
AI LA. Earth Summit — Apr 2021

Dual-Mandate Patrols: Multi-Armed Bandits for Green Security
Beijing Academy of Artificial Intelligence. — Mar 2021
University College London. AI Society — Feb 2021

Invited Panels

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

Guest Lectures

Columbia University. IEOR E4505: Operations Research in Public Policy — Spring 2025
American University of Cairo. — Spring 2025
USC. ISE 625. Analytics for Social Impact — Spring 2025

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

→ *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 $\tilde{\$}$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 Gölz

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)
Nature Sustainability

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 admissions committee — 2025

Outreach

Speaking

UMD. Student Sustainability Summit	May 2025
Harvard. CS 290, Navigating grad school, *panelist*	Nov 2023

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

Mentoring

Harvard University. InTouch Peer Mentor — 2020 – 2023
Harvard University. Women in STEM Mentor — 2019 – 2020
Dartmouth College. Women in Computer Science — 2017 – 2018

Volunteering

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

Press

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

AIhub. 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

Business Insider. Conservationists are using artificial intelligence to map out the best ways for saving threatened wildlife and resources Oct 2022

Oxford Science. AI in conservation: a modern-day solution to the biodiversity crisis? March 2022

The Hill. These new technologies could transform wildlife conservation. Feb 2022

Harvard SEAS. Computer Conservation. Nov 2021

AIhub. Interview with Lily Xu. Oct 2021

Engadget. PAWS anti-poaching AI predicts where illegal hunters will show up next. Mar 2021

Mongabay. Where to patrol next: 'Netflix' of ranger AI serves up poaching predictions. Nov 2020

Harvard SEAS. Preventing poaching. Jun 2020

BBC Sounds. How tech is tackling wildlife trafficking. Jun 2020

BBC World Service. Using technology to take on poachers. Aug 2019

USC Viterbi Magazine. AI is for Animals. Apr 2019

References

Milind Tambe milind_tambe@harvard.edu
Gordon McKay Professor of Computer Science, Harvard University
Director of AI for Social Good, Google Research

Yiling Chen yiling@seas.harvard.edu
Gordon McKay Professor of Computer Science, Harvard University

Andrew Davies andrew_davies@fas.harvard.edu
Assistant Professor of Organismic and Evolutionary Biology, Harvard University

Fei Fang feifang@cmu.edu
Associate Professor, Carnegie Mellon University

Nikhil Garg ngarg@cornell.edu
Assistant Professor, Cornell Tech