ANDI PENG

CONTACT INFORMATION Ray and Maria Stata Center andipeng@{mit.edu, csail.mit.edu} 32 Vassar Street +1 (440) 715-0384 Cambridge, MA 02139 https://andipeng.com **EDUCATION** 2020 - Present Massachusetts Institute of Technology Ph.D. Electrical Engineering and Computer Science Cambridge, MA Interests: reinforcement learning, meta-IRL, human-robot interaction 2013 - 2018 Yale University, cum laude B.S. Cognitive Science New Haven, CT Global Affairs, with distinction B.A. **EXPERIENCE** 2020 -Improbable AI Group, MIT CSAIL Cambridge, MA Graduate Research Assistant Advisor: Pulkit Agrawal 2018 - 2020 Adaptive Systems and Interaction Group, Microsoft Research Redmond, WA AI Resident Mentors: Ece Kamar, Besmira Nushi, Emre Kiciman, Kori Inkpen, Nebojsa Jojic 2018 White House Office of Science and Technology Policy (OSTP) Washington, DC National Institute for Standards and Technology (NIST) Gaithersburg, MD Policy Intern/Research Associate Mentor: Jake Taylor 2016 - 2018 New Haven, CT Social Robotics Lab, Yale University Undergrad Researcher Advisor: Brian Scassellati **NASA Glenn Research Center** 2016 - 2017 Cleveland, OH MARTI Researcher Mentors: Justin Gray, Jeffrey Chin SELECTED FELLOWSHIPS, HONORS, AND AWARDS 2020 - 2025 NSF Graduate Research Fellowship \$138,000 2018 Fox Fellowship, University of Cambridge \$30,000 (declined) 2017 Truman Scholarship \$30,000 2017 Douglas A. Beck Prize, Yale University "To an outstanding student for high academic achievement, leadership potential, personal integrity, and commitment to public service" 2016 John D. Heinz Fellowship, Yale University \$14,000 2015 Nathan Hale Scholarship, Yale University \$55,000

2014

"A special distinction that reflects the university's esteem for past and future achievements"

The President's Volunteer Service Award, Obama's Council on Service and Civic Participation

2013 Appointment to the United States Military Academy at West Point Nominations from Senator Sherrod Brown and Congressman Steve LaTourette (declined)

REFEREED CONFERENCE PUBLICATIONS

C4. Human-Machine Collaboration for Fast Land-Cover Mapping.
Caleb Robinson, Anthony Ortiz, Kolya Malkin, Blake Elias, **Andi Peng**, Dan Morris, Bistra Dilkina, and Nebojsa Jojic.
AAAI 2020.

- C3. The Perils of Objectivity: Towards a Normative Framework for Fair Judicial Decision-Making. **Andi Peng** and Malina Simard-Halm. AIES 2020.
- C2. What You See is What You Get? The Impact of Representation Criteria on Human Bias in Hiring. Andi Peng, Besmira Nushi, Emre Kiciman, Kori Inkpen, Siddharth Suri, Kori Inkpen, and Ece Kamar. HCOMP 2019.
- C1. Conceptual Feasibility Study of the Hyperloop Vehicle for Next-Generation Transport.
 Kenneth Decker, Jeffrey Chin, Andi Peng, Colin Summers, Golda Nguyen, Andrew Oberlander,
 Gazi Sakib, Nariman Sharifrazi, Christopher Heath, Justin Gray, and Robert Falck.
 NASA Technical Report, AIAA SciTech 2017.

JOURNAL PUBLICATIONS

J1. How different AI models effect accuracy and bias of human decision-making. **Andi Peng**, Besmira Nushi, Kori Inkpen, Emre Kiciman, and Ece Kamar. *In preparation*.

REFEREED WORKSHOP PUBLICATIONS

- W2. On the Nature of Bias Percolation: Assessing Multiaxial Collaboration in Human-AI Systems. Andi Peng, Besmira Nushi, Kori Inkpen, Emre Kiciman, and Ece Kamar. CHI 2020, Workshop on *Human-Centered Approaches to Fair and Responsible AI*.
- W1. Human-Machine Collaboration for Fast Land-Cover Mapping.
 Caleb Robinson, Anthony Ortiz, Kolya Malkin, Blake Elias, Andi Peng, Dan Morris, Bistra Dilkina, and Nebojsa Jojic.
 ICLR 2020, Workshop on Climate Science and Adaptation.

NeurIPS 2019, Workshop on Tackling Climate Change with Machine Learning.

POLICY WORK

Contributions made to institutional policy work.

- P3. Report on Algorithmic Risk Assessment Tools in the U.S. Criminal Justice System. The Partnership on AI. Working Group on Fairness, Transparency, and Accountability. 2019.
- P2. National Strategic Overview for Quantum Information Science. The White House. Office of Science and Technology Policy. 2018.
- P1. Nigeria: Tracking and Promoting Good Governance.

 United States Institute of Peace. Through the Yale Jackson Institute for Global Affairs.

 2016.

INDUSTRY EXPERIENCE

2019 - 2020	Research Canvas Incubation Applied Scientist II	on, Microsoft AI&R	Redmond, WA
2017	Electronic Crimes Team, Fa	acebook	Menlo Park, CA
	Security Engineering Intern Created threat modeling to a sex trafficking, and state-sp	aid investigators. Collaborated with law enforcement or onsored information cases.	ı counter-terrorism
2014 - 2015	IT Central Station		Tel Aviv, Israel
	Product Manager		
INVITED TA	LKS AND PRESENTATION	S	
Jun 2020	Microsoft Research Power	Lunch. Online (previously Redmond, WA).	C2.
Apr 2020	CHI 2020 Workshop on Fair and Responsible AI. Online (previously Honolulu, H		
Feb 2020	AIES 2020 spotlight session. New York, NY.		C3.
Oct 2019	HCOMP 2019 conference session. Skamania, WA.		C2.
Jun 2019	Microsoft AI&R Diversity, Inclusion and Belonging Day. Redmond, WA.		C2., P3.
May 2019	Microsoft AI for Good Group. Redmond, WA.		C2.
Sep 2018	Microsoft Research AI Seminar. Redmond, WA.		P2.
Jan 2017	AIAA SciTech 2017 conference session. Grapevine, TX.		C1.
Aug 2016	NASA Aeronautics Research Mission Directorate. Glenn, OH.		C1.
Jun 2014	Hubei University School of International Studies. Enshi, China.		
TEACHING			
	Yale Computer Science De	partment	
T.A.	CPSC 100 (CS50): Introduction to Computer Science		Fall 2017
T.A.	CPSC 223: Data Structures and Programming Techniques		Spring 2017
T.A.	•		Spring 2016
Head T.A.	CPSC 100 (CS50): Introduction to Computer Science Fall 2015, 2016 First undergraduate head TA in university history for the largest engineering course in university history. Managed a course staff of 62 for 450+ students. Had weekly teaching sections professionally filmed and produced for streaming on the course website.		
	Yale Astrophysics Departm	nent	
T.A.	ASTR 343: Gravity, Astrophysics, and Cosmology		Spring 2015
PROFESSION	NAL SERVICE		
	Reviewer	CHI 2020	
	Board of Advisors	Yale Jackson School of Global Affairs, 2020 - Present	
	Student Advisory Board Yale Psi Chi Honor Society, 2017 - 2018 Yale Jackson Institute for Global Affairs, 2016 - 2018 Yale Brady-Johnson Program in Grand Strategy, 2017 - 2018		- 2018
	Mentor	Yale FLOAT (Women and Minorities in CS), 2016 - 201	18

2016 - 2017 Yale Asian-American Cultural Center

Peer Liaison

The sole upperclassman peer mentor in Berkeley College (one of 14 residential colleges at Yale). Organized diversity initiatives, programming, and events across the university at large.

2015 - 2016 Yale Women's Club Soccer

Captain

Managed team tryouts, practices, and social events.

2013 - 2015 **Teaching Peace Initiative**

Deputy Executive Director

Helped lead a student-run 501(c)(3) for teaching peace-curriculum in schools. Operational in 21 states and 3 continents at time of transition.

TECHNICAL SKILLS

Languages Python, Java, C/C++, R, JavaScript, LATEX

Software PyTorch, TensorFlow, Unix/Linux, OpenAI Gym

LANGUAGES (HUMAN)

English Native Mandarin Native

French Conversational