ANDI PENG

CONTACT INFORMATION

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EDUCATION

	Massachusetts Institute of Technology	2020 - Present
Ph.D.	Electrical Engineering and Computer Science	Cambridge, MA
	Interests: *reinforcement learning, human-robot interaction*	

	Yale University, *cum laude*	2013 - 2018
B.S.	Cognitive Science	New Haven, CT
B.A.	Global Affairs, *with distinction*	

RESEARCH APPOINTMENTS

2020 -	**Improbable AI Lab, 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	**Social Robotics Lab, Yale University**	New Haven, CT
	Undergraduate Research Assistant	
	Advisor: Brian Scassellati	

2016 - 2017	**NASA Glenn Research Center**	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
	"A special distinction that reflects the university's esteem for past and future achievements"	
2014	The President's Volunteer Service Award, Obama's Council on Service and Civic Participation	

2013	National Merit Scholarship	$2,500
2013	Appointment to the United States Military Academy at West Point	*(declined)*
	Nominations from Senator Sherrod Brown and Congressman Steve LaTourette	

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 (oral).

C3. [The Perils of Objectivity: Towards a Normative Framework for Fair Judicial Decision-Making.](#)
Andi Peng and Malina Simard-Halm.
AIES 2020 (spotlight).

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

W3. [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*.

W1-2. [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, Microsoft AI & Research**	Redmond, WA
	Applied Scientist II	
2017	**Electronic Crimes Team, Facebook**	Menlo Park, CA
	Security Engineering Intern	

Created threat modeling to aid investigators. Collaborated with law enforcement on counter-terrorism, sex trafficking, and state-sponsored information cases.

2014 - 2015	**IT Central Station**	Tel Aviv, Israel
	Product Manager	

INVITED TALKS AND PRESENTATIONS

Jun 2020	Microsoft Research Power Lunch. Online (previously Redmond, WA).	C2.
Apr 2020	CHI 2020 Workshop on Fair and Responsible AI. Online (previously Honolulu, HI).	W2.
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

MIT Electrical Engineering and Computer Science

Co-Lead T.A.	6.S090: Deep Learning for Control	IAP 2021

Yale Computer Science

T.A.	CPSC 100 (CS50): Introduction to Computer Science	Fall 2017
T.A.	CPSC 223: Data Structures and Programming Techniques	Spring 2017
T.A.	CPSC 202: Mathematical Tools for Computer Science	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

T.A.	ASTR 343: Gravity, Astrophysics, and Cosmology	Spring 2015

PROFESSIONAL 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
Mentor	Yale FLOAT (Women and Minorities in CS), 2016 - 2018

OTHER SERVICE

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*
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, Gym, OpenCV, Stata

LANGUAGES (HUMAN)

English	Native
Mandarin	Native
French	Conversational