ANDI PENG

CONTACT INFORMATION

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New Haven, CT

EDUCATION

Ph.D. **Massachusetts Institute of Technology** Eventually Electrical Engineering and Computer Science Cambridge, MA

Computer Science and Artificial Intelligence Laboratory (CSAIL)

B.S., B.A. Yale University 2013 - 2018

cum laude, GPA: 3.9/4.0 Cognitive Science

Thesis: An Integrated Machine Learning Approach to Studying Terrorism

Global Affairs, with distinction

Capstone: Early Detection of Boko Haram Attacks in Nigeria

AFFILIATIONS

2018 - Microsoft Research, Adaptive Systems and Interaction Group 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 Yale University, Social Robotics Lab New Haven, CT

*Undergrad Researcher*Mentor: 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 International 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"

2017 Brady-Johnson Grand Strategy Research Grant, Yale University \$4,000

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 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.

Proceedings of the 34th AAAI Conference on Artificial Intelligence (AAAI 2020). [Oral, 20.6% Acceptance Rate]

C3. The Perils of Objectivity: Towards a Normative Framework for Fair Judicial Decision-Making. **Andi Peng** and Malina Simard-Halm.

Proceedings of the 3rd AAAI/ACM Conference on Artificial Intelligence, Ethics, and Society (AIES 2020). [Spotlight, 34.1% Acceptance Rate]

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.

Proceedings of the 7th AAAI Conference on Human Computation and Crowdsourcing (HCOMP 2019). [25.0% Acceptance Rate]

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.

Proceedings of the 55th AIAA Aerospace Sciences Meeting (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 CONTRIBUTIONS

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.

Nigeria: Tracking and Promoting Good Governance. **United States Institute of Peace**. Through the Yale Jackson Institute for Global Affairs. 2016.

INDUSTRY EXPERIENCE

2019 -	Microsoft AI & Research, Research Canvas Applied Scientist II AI Strategy and Architecture Team	Redmond, WA
2017	Facebook, eCrime Team Security Engineering Intern Created threat modeling to aid investigators. Collaborated with law enforcement on cosex trafficking, and state-sponsored information cases.	enlo Park, CA
2014 - 2015	IT Central Station Product Manager Designed BI workflows and new site features.	Геl Aviv, Israel
NVITED TAI	LKS AND PRESENTATIONS	
Jun 2020	Microsoft Research Power Lunch. Online (previously Redmond, WA).	C2.
Apr 2020	Workshop on Fair and Responsible AI, CHI 2020. Online (previously Honolulu, HI)	. W2
Feb 2020	Spotlight, AIES 2020. New York, NY.	C3
Oct 2019	Conference session, HCOMP 2019. Skamania, WA.	C2
Jun 2019	Microsoft AI&R Diversity, Inclusion and Belonging Day. Redmond, WA.	C2., P3
May 2019	AI for Good Group, Microsoft. Redmond, WA.	C2
Sep 2018	Microsoft Research AI Seminar. Redmond, WA.	P2
Jan 2017	Conference session, SciTech 2017. Grapevine, TX.	C1
Aug 2016	Aeronautics Research Mission Directorate, NASA. Glenn, OH.	C1.
Jun 2014	School of International Studies, Hubei University. Enshi, China.	
TEACHING		
T.A. T.A. T.A.	Yale Computer Science Department CPSC 100 (CS50): Introduction to Computer Science CPSC 223: Data Structures and Programming Techniques CPSC 202: Mathematical Tools for Computer Science	Fall 2017 Spring 2017 Spring 2016
Head T.A.	•	
T.A.	Yale Astrophysics Department 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

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.

LANGUAGES (HUMAN)

English Native Mandarin Native

French Conversational