

MAGGIE OATES

ORCID ID: 0000-0002-1109-2030

5000 Forbes Ave, Pittsburgh, Pennsylvania 15213

XXX-XXX-XXXX ♦ moates@cmu.edu ♦ oatesmargar@gmail.com

EDUCATION

Carnegie Mellon University, PhD Student

Societal Computing PhD, Institute for Software Research

Research Interests: Usable privacy and security, Tech ethics & policy, Arts-based methods

Started August 2017

Pittsburgh, PA

Indiana University, BS in Computer Science

Concentration: Artificial Intelligence

Minors: Mathematics, Linguistics, International Studies

May 2017

Bloomington, IN

ONGOING PROJECTS

Privacy and Security in the Arts

January 2018

Artists and museums are increasingly turning to digital data as a medium. The context of art poses new challenges in data governance; while privacy preserves psychological safety, art actively disrupts it. Users don't walk into a gallery expecting a data use agreement. We focus on the case study of "Project Amelia," a large-scale immersive theater production involving real technology, over 100 production team members, and over 800 audience members who contributed their social media data to the performance.

Online Interview Experiment

April 2018

Online interviews are a popular research tool, but are an under-studied medium of data collection. We are conducting and analyzing 150 online interviews in a large-scale online experiment to assess differences of data across 7 modes of interviewing (e.g., email vs video).

Mapping Machine Learning

July 2019

Interdisciplinary project to map out public-facing deployments of Machine Learning in the Pittsburgh, PA area. The team includes public policy, participatory design, and computer science representation.

PUBLICATIONS

Maggie Oates, Yama Ahmadullah, Abigail Marsh, Chelse Swoopes, Shikun Zhang, Rebecca Balebako, and Lorrie Faith Cranor. "Turtles, Locks, and Bathrooms: Understanding Mental Models of Privacy Through Illustration." In *Proceedings on Privacy Enhancing Technologies (PETS '18)*, 2018. **Best Student Paper Award**.

Jessica Colnago, Summer Devlin, **Maggie Oates**, Chelse Swoopes, Lujo Bauer, Lorrie Cranor, and Nicolas Christin. "It's Not Actually That Horrible": Exploring Adoption of Two-Factor Authentication at a University", In *Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems*, ACM, 2018.

Hana Habib, Pardis Emami Naeini, Summer Devlin, **Maggie Oates**, Chelse Swoopes, Lujo Bauer, Nicolas Christin, and Lorrie Faith Cranor. "User Behaviors and Attitudes Under Password Expiration Policies." In *Proceedings of the Fourteenth Symposium on Usable Privacy and Security (SOUPS'18)*. 2018.

EXPERIENCE

Robotics Institute Summer Scholar

Carnegie Mellon University

Summer 2016

Pittsburgh, PA

- Contributed to a ground robot for automated plant phenotyping as part of the ARPA-E TERRA program
- Integrated a stereo camera and developed a vision algorithm for plant stalk detection in challenging field conditions

Social Informatics Researcher

Indiana University

Dec 2014 - Dec 2015

Bloomington, IN

- Studied the sociotechnical impact of character encoding on searchability for minority groups
- Awarded 2nd Overall at the IU Computer Science Research Symposium

Technology Analyst Intern

JPMorgan Chase & Co

Summer 2015

Chicago, IL

- Contributed to a greenfield Java web application on a team of 11

Resident Assistant & Diversity Educator

Indiana University

Aug 2014 - Dec 2015

Bloomington, IN

- Facilitated two dozen educational programs and events to educate 1000 students & staff on diversity & inclusion topics (2014)
- Supported a floor of 50 women in STEM (2015) in academic & community development

Field Intern

Freedom Indiana

Fall 2013 - 2014

Bloomington, IN

- Mobilized over 400 local volunteers in a grassroots campaign against anti-LGBTQ legislation

FELLOWSHIPS & SCHOLARSHIPS

K&L Gates Fellowship in Ethics and Computational Technology	2019
National Science Foundation Graduate Research Fellowship Honorable Mention	2019
CyLab Presidential Fellowship	2018
Interactive Intelligence Corporate Partner Scholarship	2016
National Merit Scholar	2013

GRANTS

CMU Interdisciplinary Project Seed Grant (GuSH)	2019
PEPR Diversity Travel Grant	2019
SOUPS Student Travel Grant	2019
PETS NSF Travel Grant	2018

SERVICE

AnitaB.org Board of Trustees <i>Board Member</i>	Oct 2017 - Oct 2019
Graduate Student Association <i>Student Senate Representative</i>	Aug 2017 - Sept 2018
NSF Research Experience for Undergraduates Mentor <i>Mentor for two undergraduate students working on an arts and computing research project</i>	Summer 2019
Ethics for Technologists Lecture Series <i>Founder, Organizer</i>	Fall 2018 -
Science & Technology Studies for CS Reading Group <i>Founder, Organizer</i>	Summer 2018
NSF Research Experience for Undergraduates Mentor <i>Mentor for an undergraduate student working on security research</i>	Summer 2019
CMU Teaching Award Committee <i>Committee Member</i>	Spring 2018
Board of Aeons <i>Undergraduate student advisor to Indiana University President McRobbie</i>	June 2016 - May 2017
FIRST Lego Robotics	June - Dec 2015 <i>Co-Coach</i>
Indiana University Sexual Violence Prevention Taskforce	Fall 2015
International Collegiate Programming Competition	Fall 2014
Indiana University Student Assoc. <i>Speaker of the House, Senate Member</i>	Fall 2014 - Dec 2016
External Reviewing ACM CSCW (2019) ACM CHI (2019) ACM TOPS (2018) ACM CCS (2018, shadow)	

TEACHING

17-630 Ethics and Policy Issues in Computing <i>Teaching Assistant, Carnegie Mellon (guest lectures, grading)</i>	Spring 2020
17-630 Ethics and Policy Issues in Computing <i>Teaching Assistant, Carnegie Mellon (guest lectures, grading)</i>	Spring 2019
CSCI-C343 Intro to Data Structures Spring 2017 <i>Undergraduate Instructor, Indiana University (lab curriculum, grading)</i>	
CSCI-C211, Intro to Computer Science <i>Undergraduate Instructor, Indiana University (lab curriculum, grading)</i>	Spring 2016 - Fall 2017

PRESENTATIONS & TALKS

Privacy Engineering Practice & Respect “Privacy in the Arts”	Aug 2019
Symposium on Usable Privacy and Security “Against Trust in Technology”	Aug 2019
re:publica Accra “Turtles, Locks, and Bathrooms”	Dec 2018
Opportunities in Undergrad Research in CS “Anything But Not Everything” (student keynote)	Oct 2018
Cylab Partners Conference “Turtles, Locks, and Bathrooms”	Oct 2018
Grace Hopper Conference “Behind the Scenes of GHC” (moderator, panel on nonprofit governance)	Oct 2018
Symposium on Usable Privacy and Security “Exploring 2FA Adoption At a University” (poster)	Aug 2018
Privacy Enhancing Technologies “Turtles, Locks, and Bathrooms”	Jul 2018
CMU Privacy Seminar “Turtles, Locks, and Bathrooms”	Jul 2018
Privacy Law Scholars Conference “Turtles, Locks, and Bathrooms” (by invitation only)	Jun 2018
Opportunities in Undergrad Research in CS “The Graduate School Experience” (panelist)	Oct 2017
Indiana University Women in Computing Celebration “The Robotanist” (student keynote)	Apr 2017
Robotics Institute Summer Scholar Symposium “Sorghum Stalk Detection for an Agricultural System” (poster)	Aug 2016
Indiana University Research in CS Symposium “Your Name Here: Exploring the Sociotechnical Impacts of Character Encoding” (poster)	Apr 2015

OTHER PROJECTS

Please Try This At Home Organizer for a free, crowd-funded, community conference exploring biohacking, transhumanism, and radical bodily autonomy outside of traditional institutional structures.	Sept 2019
“Own Up” Led a small design and engineering team to build an art installation that explored public social media data for <i>Project Amelia</i> , an immersive theater production	Sept 2019

“It Pains You”

Sept 2018

Designer and director for an immersive group art piece exploring the distinction between pain and violence for Bricolage Production Company’s *Bazaar*

FAST FACTS

Tools I Play With	C, Python, C++, Java, Racket (Scheme), OpenCV, ROS, bash
Courses	Ethics of AI, AI for Social Good, Privacy Policy Law & Technology
Research Courses	Empirical Methods, Experimental Design
Conferences	Color of Surveillance, Out4Undergrad, Allied Media, Radical Exchange
Miscs	Embroidery, Conceptual Art, Cats, Community Organizing, Birdwatching

A NOTE ON VALUES

I am constantly striving to make my professional and personal life adhere to a strong set of values. While I often fail, and while these values are in constant flux, they are my aspirations. As a result, I rely on a set of heuristics to guide my actions, many of which are relevant to professional spheres. I do not include these guidelines to evangelize, but to add context to my professional interactions and publicly state them a tool of accountability.

Flight Restrictions

In an effort to reduce my carbon footprint, I fly only once per year or in extraordinary circumstances.

Funding & Labor Restrictions

As part of my commitment to domestic and global nonviolence, I avoid accepting money, resources, or collaborations from the defense, immigration enforcement, prison, and detention industries.