

임제인 Jane Im

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University of Michigan, Ann Arbor
Computer Science & Engineering
School of Information

Research Interests

Social Computing, Human-Computer Interaction, Consent, Privacy, Digital Safety

I research how socio-technical systems can be designed and built with users' consent at their core. Specifically, I combine empirical methods, system-building, and theory to tackle various integrity issues on social platforms, such as online harassment, surveillance, and data ownership problems. By focusing on the relationship between such issues and users' consent, I develop ways to improve socio-technical systems' privacy controls, safety and governance tools, and business models.

Education

University of Michigan , Ann Arbor, MI Ph.D. in Information & Computer Science and Engineering Advisors: Florian Schaub (Information), Nikola Banovic (CSE) School of Information & Division of Computer Science and Engineering, College of Engineering <i>(As the only PhD student, I assisted CSE and SI faculty in drafting a proposal to aid students that want to pursue a PhD in both programs via the Student Initiated Doctoral Program (SIDP).)</i> GPA: 3.85/4.0	Sept. 2018 - current
Korea University , Seoul, Republic of Korea B.B.A. in Business Administration B.S. in Computer Science and Engineering GPA: 4.29/4.50	Mar. 2013 - Aug. 2018
Massachusetts Institute of Technology , Cambridge, MA Undergraduate special student program (non-degree, full-time enrollment) GPA: 4.8/5.0	Sept. 2016 - May 2017

Employment

Meta , Menlo Park, CA (remote) <i>User Experience Research Intern</i> for Facebook with Scarlett Sheng	June 2021 - Aug. 2021
Sassafras Tech Collective , Ann Arbor, MI (remote) <i>Software Development & Research Intern</i> with Jill Dimond	May 2020 - Aug. 2020
Airbnb , San Francisco, CA <i>Research Intern Recipient 2020, Internship deferred due to COVID-19</i>	
University of Michigan , Ann Arbor, MI <i>Research Assistant, Teaching Assistant</i>	Sept. 2018 - Present

Awards and Recognitions

Special Recognition for Outstanding Review ACM Symposium on User Interface Software and Technology 2022 (UIST 2022)	2022
Barbour Scholar University of Michigan, Ann Arbor, MI Provides one year of funding to “students working on dissertations that are unusually creative, ambitious, and impactful” who are women from Asia or the Middle East.	2022-2023
Finalist for Meta PhD Research Fellowship Meta, Menlo Park, CA Finalist under Privacy and Data Use	2022
Best Paper Honorable Mention Award ACM Conference on Human Factors in Computing Systems (CHI 2021) [c4]	2021
Best Paper Runner Up Award ACM Conference on Web Science (WebSci 2020) [c5]	2020
2017 Annual Soft Robotics Competitions 1st prize in Design Harvard University, Cambridge, MA	2017
Big Data Analytics Competition 3rd Prize SK Telecom, Seoul, Republic of Korea	2015
Korea University Honor Scholarships Korea University, Seoul, Republic of Korea <i>Honors Scholarships</i> , 33% of tuition covered for 2014 spring, 50% of tuition covered for 2015 fall <i>Best Honors Scholarships</i> , tuition fully covered for 2014 fall	2014 spring & fall, 2015 fall

Publications

Proceedings and Journals

[c1] Lia Bozarth, **Jane Im**, Christopher Quarles, Ceren Budak. Wisdom of Two Crowds: Current Practices of Misinformation Moderation on Reddit and How to Improve this Process—A Case Study of COVID-19. *ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW 2023)*. Recommended for conditional acceptance with minor revisions.

[c2] **Jane Im**, Sarita Schoenebeck, Marilyn Iriarte, Gabriel Grill, Daricia Wilkinson, Amna Batool, Rahaf Alharbi, Audrey N. Funwie, Tergel Gankhuu, Eric Gilbert, Mustafa Naseem. Women’s Perspectives on Harm and Justice after Online Harassment. *ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW 2022)*.

[c3] Hariharan Subramonyam, **Jane Im**, Colleen Seifert, Eytan Adar. Solving Separation-of-Concerns Problems in Collaborative Design of Human-AI Systems through Leaky Abstractions. *ACM Conference on Human Factors in Computing Systems (CHI 2022)*. 24.7% Acceptance Rate

<https://doi.org/10.1145/3491102.3517537>

[c4] **Jane Im**, Jill Dimond, Melody Berton, Una Lee, Katherine Mustelier, Mark Ackerman, Eric Gilbert. Yes: Affirmative Consent as a Theoretical Framework for Understanding and Imagining Social Platforms. *ACM Conference on Human Factors in Computing Systems (CHI 2021)*. Yokohama, Japan. April 2021. 26.3% Acceptance Rate

[project website] **Best Paper Honorable Mention Award**

<https://doi.org/10.1145/3411764.3445778>

[c5] **Jane Im**, Eshwar Chandrasekharan, Jackson Sargent, Paige Lighthammer, Taylor Denby, Ankit Bhargava, Libby Hemphill, David Jurgens, Eric Gilbert. Still Out There: Modeling and Identifying Russian Troll Accounts on Twitter. *ACM Conference on Web Science (WebSci 2020)*. Southampton, UK. 27% Acceptance Rate **Best Paper Runner Up Award**

<https://doi.org/10.1145/3394231.3397889>

[c6] **Jane Im**, Sonali Tandon, Eshwar Chandrasekharan, Taylor Denby, Eric Gilbert. Synthesized Social Signals: Computationally-Derived Social Signals from Account Histories. *ACM Conference on Human Factors in Computing Systems (CHI 2020)*. Honolulu, HI. April 2020. 24.3% Acceptance Rate
<https://doi.org/10.1145/3313831.3376383>

[c7] **Jane Im**, Amy X. Zhang, Christopher J. Schilling, David Karger. Deliberation and Resolution on Wikipedia: A Case Study of Request for Comments. *ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW 2018)*. New York, NY. November 2018. 25% Acceptance Rate
<https://doi.org/10.1145/3274343>

[c8] **Jane Im**, Paul Medlock-Walton, Mike Tissenbaum. App Inventor VR Editor for Computational Thinking. *Computational Thinking in Education Conference (CTE 2017)*. Hong Kong. June 2017.
<https://www.eduhk.hk/cte2017/doc/CTE2017%20Proceedings.pdf#page=171>

Papers under submission

[c9] Paul Resnick, Aljohara Alfayez, **Jane Im**, Eric Gilbert. Informed Crowds Can Effectively Identify Misinformation. *Under submission*.
<https://arxiv.org/pdf/2108.07898.pdf>

[c10] **Jane Im**, Ruiyi Wang, Weikun Lyu, Nick Cook, Hana Habib, Lorrie Cranor, Nikola Banovic, Florian Schaub. [Paper on privacy] *Under submission*.

Organized Panels

[o1] Douglas Zytco, **Jane Im**, Jonathan Zong. Consent: A Research and Design Lens for Human-Computer Interaction. *Computer Supported Cooperative Work and Social Computing (CSCW'22 Companion)*. Virtual. November 2022.

Posters

[p1] **Jane Im**, Nikola Banovic, Florian Schaub. Designing and Building Social Platforms Grounded in Consent. *Trust & Safety Research Conference*. Stanford, CA. September 2022.

Workshop Papers

[w1] Sarita Schoenebeck, **Jane Im**, Amna Batool, Daricia Wilkinson, Audrey Funwie, Rahaf Alharbi, Marilyn Iriarte, Gabriel Grill, Eric Gilbert, Mustafa Naseem. Repairing Online Harms: Assessing Punitive and Reparative Justice Approaches. *First Annual Conference of The Platform Governance Research Network*. March 2021.

[w2] **Jane Im**, Jeeyoon Hyun, Jill Dimond, Melody Berton, Eric Gilbert. Building Social Platforms around Affirmative Consent. *Moving Forward Together: Effective Activism For Change Workshop at ACM Conference on Human Factors in Computing Systems (CHI 2020)*. Honolulu, HI. April 2020.

[w3] **Jane Im**. Non-consensual Images & Videos and Consent in Social Media. *Sensitive Research, Practice, and Design in HCI Workshop at ACM Conference on Human Factors in Computing Systems (CHI 2019)*. Glasgow, UK. May 2019.

Media Publication

[m1] Heeryung Choi, **Jane Im**, Cindy Lin, Yixin Zou. An open letter to the U-M community. *The Michigan Daily*.
<https://www.michigandaily.com/opinion/op-eds/an-open-letter-to-the-u-m-community/>
 I co-wrote an op-ed on anti-Asian racism in the U.S. (and academia).

Research Experience

University of Michigan

Sept. 2018 - Present

Research Assistant

- Currently researching privacy and consent mechanisms that protect people's safety and agency in user-to-system and user-to-user interactions.
- Using social science theories, system-building, interviews, and surveys, uncovered how lack of consent can lead to a wide range of problems on social media, with users wanting fine-grained and usable privacy and safety tools [c4, c6].
- Built ML models to identify potential Russian trolls on Twitter, using an unbalanced dataset of 2.2K Russian troll accounts released by Twitter and 170K control accounts [c5].

Facebook

June 2021 - Aug. 2021

User Experience Research Intern, advised by Scarlett Sheng (other mentors: Rui Yang & Ayesha Zafar)

- Impacted Facebook's privacy strategy by doing foundational mixed-method research to understand users' perception of consent in the context of online behavioral advertising and App Tracking Transparency.
- Quantitatively analyzed existing survey data to understand Facebook advertisers' goals.

Sassafras Tech Collective

May 2020 - Aug. 2020

Software Development & Research Intern, advised by Jill Dimond

- Built and conducted (remote) usability testing of a moderation system.
- Based on the usability testing results, designed mockups and further developed the moderation system.

Haystack Group, MIT

Apr. 2017 - Apr. 2018

Undergraduate Research, advised by Amy X. Zhang and David Karger

- Investigated how various factors affect the outcome of Request for Comments (RfC), a deliberative discussion on Wikipedia, by using mixed methods: 1) interviewing Wikipedia editors and 2) creating and quantitatively analyzing an English RfC dataset [c7].

MIT App Inventor, MIT

Oct. 2016 - May 2017

Undergraduate Research, advised by Paul Medlock-Walton and Hal Abelson

- Enabled novice programmers to create modular code in the App Inventor, by developing customized blocks within the system that can execute any functions of an imported API.
- Implemented virtual reality (VR) blocks in the App Inventor to help novice users build VR apps [c7].

Soft Active Materials Lab, MIT

Sept. 2016 - Feb. 2017

Undergraduate Research, advised by Hyunwoo Yuk

- Developed 3D printing based soft robotic hands with stand-alone actuation and control system.
- Implemented the software interface for precise 3D printing for advanced soft materials.

Invited Talks and Guest Lectures

[t1] Invited talk at Expertise@Scale Lab, Carnegie Mellon University

Mar. 2022

Designing and Building Social Platforms Grounded in Consent

[t2] DUB Shorts Seminar, University of Washington

Aug. 2021

Yes: Affirmative Consent as a Theoretical Framework for Understanding and Imagining Social Platforms

[t3] MetaGov Seminar, Metagovernance Project Reimagining and Building Social Platforms Grounded in Consent	Apr. 2021
[t4] HCI Seminar, Seoul National University Reimagining and Building Social Platforms Grounded in Consent	Jan. 2021
[t5] CS 598 Antisocial Computing Guest Lecture, University of Illinois at Urbana-Champaign Building Social Platforms Grounded in Consent	Oct. 2020
[t6] EECS 598 Human-Computer Interaction Guest Presentation, University of Michigan Synthesized Social Signals: Computationally-Derived Social Signals from Account Histories	Apr. 2020
[t7] PhD Recruitment Flash Talk, University of Michigan School of Information Still Out There: Modeling and Identifying Russian Troll Accounts on Twitter	Feb. 2019
[t8] Wikimedia Showcase, Wikimedia Foundation Deliberation and Resolution on Wikipedia: A Case Study of Requests for Comments	Sept. 2018
[t9] IAR Seminar, University of Michigan School of Information Deliberation and Resolution on Wikipedia: A Case Study of Requests for Comments	Sept. 2018

Press

Quoted in *Privacy by Design laws will kill your data pipelines*.
Protocol. Hirsh Chitkara. May 16, 2022.

UMSI doctoral candidate Jane Im named Barbour Scholar.
University of Michigan School of Information News. May 17, 2022.

Jane Im awarded Rackham Barbour Scholarship.
University of Michigan CSE News. Mar. 25, 2022.

Predictive Model Identifies Wikipedia Arguments that Will Never Get Resolved.
Campus Technology. Dian Schaffhauser. Nov 27, 2018.

A Third of Wikipedia Discussions Are Stuck in Forever Beefs.
Vice Motherboard. Samantha Cole. Nov 7, 2018.

Teaching Experience

SI 539: Web Design, Development, and Accessibility, University of Michigan Winter 2020
Graduate Student Instructor

- A graduate course providing hands-on approach to learning responsive, accessible front-end programming for Web Design. Topics covered include HTML5, CSS3 (including Bootstrap framework), JavaScript, and the POUR design principles of accessible design.
- Led 2 discussion sections per week.

SI 339: Web Design, Development, and Accessibility, University of Michigan Fall 2019
Graduate Student Instructor

- An undergraduate version of the course above.

Academic Mentoring

I listed the next positions of students for whom I helped faculty write a letter of recommendation (or those I worked with for a long time). If you're a student who feel uncomfortable having your name included for whatever reason, please let me know.

Paige Lighthammer, University of Michigan Nuclear Engineering (Undergraduate) [c5]	Sept. 2018 - Apr. 2019
Jackson Sargent, University of Michigan CSE (Undergraduate) [c5]	Sept. 2018 - Apr. 2019
Ankit Bhargava, University of Michigan CSE (Undergraduate) [c5]	Sept. 2018 - Apr. 2019
Taylor Denby, University of Michigan Cognitive Science (Undergraduate) [c5, c6] <i>Next: University of Michigan, Master of Science in Information</i>	Sept. 2018 - Aug. 2019
Sonali Tandon, University of Michigan School of Information (Masters) [c6] <i>Next: Roblox, Product designer</i>	Sept. 2018 - Apr. 2019
Katherine Mustelier, University of Michigan School of Information (Undergraduate) [c4]	Mar. 2020 - May. 2020
Evan Wang, University of Michigan Computer Science (Undergraduate)	Oct. 2020 - Dec. 2020
Jake Klaristenfeld, University of Michigan CSE (Undergraduate)	Oct. 2020 - Apr. 2021
Eleanor Desmond, University of Michigan Electrical Engineering (Undergraduate)	Oct. 2020 - July 2021
Jolie Kaplan, University of Michigan CSE (Undergraduate)	Oct. 2020 - July 2021
Alice Li Wang, University of Michigan Stephen M. Ross School of Business & School of Information (Undergraduate)	Feb. 2021 - Apr. 2021
Ruiyi Yang, University of Michigan CSE (Undergraduate) [c10] <i>Next: Carnegie Mellon University, Master of Science in Intelligent Information Systems</i>	Oct. 2021 - Aug. 2022
Weikun Lyu, University of Michigan Math & CS (Undergraduate) [c10] <i>Awarded the Blue Ribbon Certificate for his presentation at the UROP symposium. Next: Meta, Software engineer</i>	Oct. 2020 - Apr. 2021; Jan. 2022 - May 2022
Nick Cook, University of Michigan Computer Science (Undergraduate) [c10]	July 2022 - Aug. 2022
Annie Chen, University of Michigan Computer Science (Undergraduate)	Oct. 2020 - Present
Sean Scarnecchia, University of Michigan CSE (Undergraduate)	Oct. 2021 - Apr. 2022; Oct. 2022 - Present

Service

Review

CHI	2021 - 2023
UIST (<i>Special Recognition for Outstanding Review</i>)	2022
IEEE Pervasive Computing	2022
ICWSM	2022
PLoS ONE	2021
CSCW	2019 - 2021
IEE ICDM	2019

Leadership

UMSI Diversity, Equity, and Inclusion Committee, PhD student representative Fall 2022 - Winter 2023

- PhD student representative for UMSI's DEI committee, which focuses on "school level efforts to promote an equitable and inclusive community across students, staff, and faculty."

UMSI PhD Student Internship Information Session, Organizer Fall 2021

- Organized a panel to give junior PhD students advice on finding and securing internships.

SI & CSE Student Initiated Doctoral Program (SIDP) Design, Assistant to faculty Fall 2020

- Assisted faculty members in drafting a proposal for evaluating students that want to pursue a PhD in both SI and CSE. Led the effort as the only PhD student.
- I was told that I may be the first PhD student to be *formally evaluated* by SI and CSE PhD program committees and enrolled in the two programs via U-M's Student Initiated Doctoral Program (SIDP).

Michigan Interactive and Social Computing (MISC), Student Organizer Fall 2020 - Winter 2021

- Co-organized speaker series on HCI and social computing.

Doctoral Executive Committee (DEC) Fall 2019 - Winter 2020

- DEC is a group of PhD students that represent the voice of PhD students at University of Michigan's School of Information.
- Organized social events and actively participated in addressing departmental issues that impact PhD students.

Skills

Programming Languages. Python, C, Java, Ruby, JavaScript, HTML, CSS, MATLAB, SQL

Research Methods. System building & User study, Usability testing, Survey, Experiment, Interview

Web framework. Django, Flask, Ruby on Rails

Software. GitHub, L^AT_EX, Linux command line

Coursework

Ph.D. courses

Computer & Network Security, Technologies to Optimize Human Learning, Microarchitecture, Human-AI Interaction, Data Mining, Doctoral Foundations Seminar, Human-Computer Interaction, Qualitative Research Methods, Interpretivist Theories in Computer-Supported Cooperative Work/Social Computing, Research Methods

Computer Science & Math undergraduate courses

Programming Language, Data Structure, Algorithms, Computer Architecture, Data Communications, Probability and Random Process, Calculus with Lab I, Computer Programming I, Introduction to Linear Algebra, Operating Systems, Artificial Intelligence, Databases, Embedded Systems, Internet Protocols, Discrete Mathematics, Theory of Computation, Advanced Computer Programming & Lab, Project for Graduation, Introduction to Inference, User Interface Design, Intelligent Multimodal User Interfaces

Last updated: October 22, 2022