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 — Sept. 2018 - current
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
(*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).*)
GPA: 3.85/4.0

Korea University, Seoul, Republic of Korea — Mar. 2013 - Aug. 2018
B.B.A. in Business Administration
B.S. in Computer Science and Engineering
GPA: 4.29/4.50

Massachusetts Institute of Technology, Cambridge, MA — Sept. 2016 - May 2017
Undergraduate special student program (non-degree, full-time enrollment)
GPA: 4.8/5.0

Employment

Meta, Menlo Park, CA (remote) — June 2021 - Aug. 2021
User Experience Research Intern for Facebook with Scarlett Sheng

Sassafras Tech Collective, Ann Arbor, MI (remote) — May 2020 - Aug. 2020
Software Development & Research Intern with Jill Dimond

Airbnb, San Francisco, CA
Research Intern Recipient 2020, Internship deferred due to COVID-19

University of Michigan, Ann Arbor, MI — Sept. 2018 - Present
Research Assistant, Teaching Assistant

Awards and Recognitions

Finalist for CSE Graduate Student Honors Competition 2022
University of Michigan, Ann Arbor, MI
Recognizes "top research done by PhD students at CSE". Selected as the representative of the Human-Centered Computing Lab and one of the final competition's five finalists. Awarded $600.

Barbour Scholar 2022-2023
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.

Finalist for Meta PhD Research Fellowship 2022
Meta, Menlo Park, CA
Finalist under Privacy and Data Use

Best Paper Honorable Mention Award 2021
ACM Conference on Human Factors in Computing Systems (CHI 2021) [c4]

Best Paper Runner Up Award 2020
ACM Conference on Web Science (WebSci 2020) [c5]

2017 Annual Soft Robotics Competitions 1st prize in Design 2017
Harvard University, Cambridge, MA

Big Data Analytics Competition 3rd Prize 2015
SK Telecom, Seoul, Republic of Korea

Korea University Honor Scholarships 2014 spring & fall, 2015 fall
Korea University, Seoul, Republic of Korea
Honors Scholarships, 33% of tuition covered for 2014 spring, 50% of tuition covered for 2015 fall
Best Honors Scholarships, tuition fully covered for 2014 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). Forthcoming.*

[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).* https://dl.acm.org/doi/10.1145/3555775

[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. Schlling, 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.pdfpage=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 (revision) at CHI 2023.*

Organized Panels

[o1] Douglas Zytko, **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] GermSyllabus talk series, Germ Network Nov. 2022
Affirmative Consent in Platform Design

[t2] Expertise@Scale Lab, Carnegie Mellon University Mar. 2022
Designing and Building Social Platforms Grounded in Consent

[t3] DUB Shorts Seminar, University of Washington Aug. 2021
Yes: Affirmative Consent as a Theoretical Framework for Understanding and Imagining Social Platforms

[t4] MetaGov Seminar, Metagovernance Project Apr. 2021
Reimagining and Building Social Platforms Grounded in Consent

[t5] HCI Seminar, Seoul National University Jan. 2021
Reimagining and Building Social Platforms Grounded in Consent

[t6] CS 598 Antisocial Computing Guest Lecture, University of Illinois at Urbana-Champaign Oct. 2020
Building Social Platforms Grounded in Consent

[t7] EECS 598 Human-Computer Interaction Guest Presentation, University of Michigan Apr. 2020
Synthesized Social Signals: Computationally-Derived Social Signals from Account Histories

[t8] Wikimedia Showcase, Wikimedia Foundation Sept. 2018
Deliberation and Resolution on Wikipedia: A Case Study of Requests for Comments

[t9] IAR Seminar, University of Michigan School of Information Sept. 2018
Deliberation and Resolution on Wikipedia: A Case Study of Requests for Comments

Press

2022 CSE Graduate Student Honors Competition highlights outstanding research.
University of Michigan CSE News. Nov 10, 2022.

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] Sept. 2018 - Aug. 2019
Next: University of Michigan, Master of Science in Information

Sonali Tandon, University of Michigan School of Information (Masters) [c6] Sept. 2018 - Apr. 2019
Next: Roblox, Product designer

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] Oct. 2021 - Aug. 2022
Next: Carnegie Mellon University, Master of Science in Intelligent Information Systems

Weikun Lyu, University of Michigan Math & CS (Undergraduate) [c10] Oct. 2020 - Apr. 2021; Jan. 2022 - May 2022
Awarded the Blue Ribbon Certificate for his presentation at the UROP symposium.
Next: Meta, Software engineer

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

Special Recognitions for Outstanding Review: CHI 2023 (3 times), UIST 2022

CHI 2021 - 2023

UIST 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, LaTeX, 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 Langugage, 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