Teaching Statement

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One of my biggest motivations of pursuing an academic career is the opportunity to teach and positively impact my students' growth. My teaching pedagogy centers around three principles:

- **Active learning**: I engage students as active participants in the learning process, e.g., by incorporating interactive activities in classrooms and providing opportunities for self-reflection.
- **Creativity**: I seek to provide a supportive environment in which my students feel encouraged to be creative, exercise autonomy, and take risks. I also bring the same creativity in my ways of designing course materials and enhancing student learning.
- **Empathy**: Power dynamics exist in any form of student-teacher relationship. I try to imagine how I would feel or react as a student for any decision I make. I also proactively gauge my students' goals and needs to adapt my teaching or mentoring style accordingly.

In this statement, I summarize my experiences of working as a Graduate Student Instructor, as a mentor to more junior students, and as an organizer for community outreach efforts on security and privacy education. Through documenting these experiences, I give concrete examples of how I incorporate my teaching pedagogy in practice. I also discuss courses I am excited to teach and how I plan to continue growing my teaching experience as a faculty member.

Teaching Experience

As a Ph.D. candidate at the University of Michigan School of Information, I worked as a Graduate Student Instructor (GSI) for two courses. SI 110 "Introduction to Information Studies" is an intro-level prerequisite course for the Bachelor of Science in Information program; the course introduces students to the key cultural, political, and economics issues in the Information Age. SI 501 "Contextual Inquiry and Consulting Foundations" is a graduate course on user-centered qualitative research methods and professional consulting; students work in teams to conduct field research and provide recommendations for clients. Both are large-size courses that involve lectures and discussion sections with 150-200 students. For both courses, my primary responsibilities included leading two weekly discussion sections (each with 20-25 students), hosting office hours, grading assignments, and assisting the lead instructor with preparing course content and rubrics. During the discussion sections, my role ranged from revisiting important points in the lecture materials to leading small in-class activities and checking in with students on assignment progress.

Beyond fulfilling standard duties as a GSI, I sought to contribute to course improvements using my knowledge and expertise. In the Intro to IS course, I developed and gave a guest lecture on privacy. As privacy could be a abstract and complicated topic to explain, **I used active learning strategies in preparing the lecture materials**. To make privacy more relatable to students' everyday life, I complemented the assigned readings with news events (e.g., the evolving debate about net neutrality), comics (e.g., cartoon from Professor Daniel Solove's TeachPrivacy series), and videos (e.g., trailer of the movie "Snowden"). To help students reflect on how their understanding of privacy may evolve, I included several interactive activities in the lecture, such as "discuss with your neighbor about what you think of the statement that privacy is dead." My students were inspired by the lecture, and several approached me after the class to inquire about privacy-related research opportunities. The course instructor invited me to give the same lecture again one year later, even though I was no longer a GSI for the course.

Another big part of my teaching philosophy is **showing empathy by recognizing the diverse backgrounds of individual students**. In the Qualitative Methods course, I noticed that struggles with proper use of citations were a common problem among international students, many of whom just started their first semester in the US. Being an international student myself, I have vivid memories of challenges in navigating US-specific citation norms and competing with native speakers using my second language through all aspects of learning. Rather than penalizing students for plagiarism without any further explanation, **I sought to turn this issue into a valuable learning opportunity that would ultimately help students grow**. For instance, in discussion sections I highlighted the importance of "writing in your own voice" and walked students through useful tools such as Google Scholar. I also scheduled 1:1 appointments with students who received low assignment grades during my office hours, in which I worked with the student to practice synthesizing knowledge from multiple sources through little exercises.

My teaching has received positive feedback from my students. In my teaching evaluations, the statement "Overall, Yixin Zou was an excellent teacher" received a median of 4.5 and 4.8 from students in SI 110 and SI 501 respectively (on a scale from 1 to 5, 5 being "strongly agree"). One student said, *"Yixin has been a wonderful GSI. She is always very respectful of students and shows a lot of interest in what students have to present/say."* Another said, *"Yixin was very open to help and explain course material. I felt really comfortable asking questions or asking for help."* **Outside**

of the classroom, I seek to support my students in their pursuit of academic interests and career paths. For instance, I wrote reference letters for seven students to support their applications to the Bachelor of Science in Information program; three of them were admitted and are now working in the IT industry. By integrating research literature and methodologies into teaching, I have also inspired students to become interested in academic research. For instance, I helped two of my students, An Doan (from SI 110) and Gina Herakovic (from SI 501), join my advisor's lab and get involved in research projects. I further provided regular guidance and feedback on Gina's master thesis on user perceptions of privacy information on smart speakers.

Mentoring Experience

Mentoring is one of my favorite parts of working in academia since it creates a rewarding and mutually beneficial experience for both me and my mentees. Over my Ph.D. journey, I have been fortunate to mentor 13 students on research projects both within and outside of the University of Michigan. My mentees have a diverse set of majors (computer science, electrical engineering, and information) and academic programs (undergraduates, master's students, and junior Ph.D. students). Some of my mentees have worked with me as research assistants for projects I lead or co-lead, whereas others developed their own projects as they worked on program milestones or participated in the Undergraduate Research Opportunity Program (UROP). Through my own experience of working in large collaborative teams, I understand that working with multiple people can sometimes lead to inconsistent goals, confusing communication, and ultimately frustrating experiences. As such, when my mentee has a professor or another Ph.D. student as their primary advisor, **I maintain frequent communications with all parties involved to establish clear expectations around the project goals, research contributions, and specific tasks**.

While each mentoring relationship is unique, I strive to blend active learning, creativity, and empathy in my general approach of mentoring. I follow a "mentoring up approach"[1] by **viewing my mentees as equal collaborators and creating opportunities for their skill development**. For instance, knowing that research could be a long and daunting process, I encourage my mentees to share work-in-progress prototypes or preliminary findings and celebrate these smaller achievements with them. In providing feedback, I strive to make it specific (e.g., saying what exactly they did well beyond "Great job!") and create opportunities for my mentees to interact with my feedback (e.g., "Here's a possible idea...what do you think?"). I also recognize that **power dynamics exist in even the best mentor-mentee relationship, and it is critical that I create a psychologically safe environment in which my mentees feel they can openly speak up about their needs**. For instance, I start each mentoring relationship with a candid conversation around expectations, such as specific goals and objectives in this collaboration, frequency of meetings, and turnaround time for feedback. I also regularly check in with my mentees to re-align our expectations as their needs may evolve over time. I focus on specific behaviors that help build trust with my mentees by being an active listener, giving timely responses to their requests, and being open about my own failures and missed goals.

I am blessed to witness my mentorship's impact on my mentees' journeys. I have co-authored five publications with my mentees, one winning the SOUPS'18 Distinguished Paper Award. One of my mentees, Kaiwen Sun, went on to become a Ph.D. student in my program and has established a strong research agenda around children's privacy and safety in smart homes. I continue working with Kaiwen by providing regular feedback on her research ideas and collaborating with her on projects she leads (e.g., CSCW'21). Beyond writing papers together, I seek to involve my mentees throughout the research process as a way to help them build critical thinking and develop new skills. For example, in working with one of my mentees Khue (Shay) Le for my dissertation research, I engage Shay in experimental design, pilot testing, and data analysis beyond her primary responsibility of implementing the survey infrastructure. Ultimately, **I view mentoring as a reciprocal relationship based on similarity and difference** — both my mentees and I share some common grounds such as similar research interests, but we also keep learning from the other person's complementary perspectives and skills.

Teaching Plan

My research and prior teaching experience has equipped me with the expertise to teach a range of theory and method courses at both undergraduate and graduate levels, for example:

- **Human-Computer Interaction (HCI) courses**: e.g., Introduction to HCI; Fundamentals of Human Behavior; Interaction Design; Design Thinking; Choice Architecture; Online Communities.
- **Method courses**: e.g, Experiment Design and Analyses; Survey Methodology; Applied Statistical Methods; Introduction to R Programming; Qualitative Methods; Design Methods; Usability Evaluation.
- **Privacy, security, and ethics courses**: e.g., Privacy in Information Technology; Privacy Laws and Public Policies; User-Centered Privacy Design; Privacy Engineering; Introduction to Computer Security; Information Ethics; Privacy and Surveillance in the Digital Age; Technology and Social Justice.

[1] `https://tomprof.stanford.edu/posting/1525`

Community Outreach

Outside of the traditional classroom and mentoring settings, I seek ways to **translate my research into beneficial knowledge for the general public**. As my research consistently shows that people struggle to make accurate risk assessment in technology use, I see the impact of teaching people concrete risks paired with actions they can take to protect themselves.

For academic researchers, a key practice in engaging with communities is to **use accessible language and avoid unnecessary academic jargon in our communications**. I incorporated this practice as I organized and ran "privacy clinics" with my labmates during the Privacy@Michigan symposia and at the Ann Arbor Farmers Market. In leading the development of handouts on different privacy-related topics, I ensured that we followed accessible design guidelines by using large font sizes, shortened URLs, and graphics that illustrate complicated concepts (e.g., step-by-step visuals showing how two-factor authentication works). During the clinics, we gave handouts to visitors, answered questions, and provided hands-on help for any technology issues they might have. I further recognize the importance of **adjusting teaching methods based on the needs of a specific audience**. For example, in my research with older adults, many participants mentioned that they were having a hard time learning new things or that they preferred paper-based materials. As such, in preparing and running workshops about online self-defense for older adults, I limited the number of topics for each session and left ample time for Q&A after introducing a topic. I also covered the same content in multiple formats (e.g., in-person, Zoom, video recordings, and printed copies) and let my students choose the one(s) that best suits their preferences.

The examples I share above represent my belief that one of the primary impacts of research should be **creating and disseminating knowledge that enhances the well-being of communities and the broader society**. As a faculty member, I will continue translating my research findings into educational efforts that help the general public better protect their security and privacy. I also envision sustainable and scalable approaches to doing such type of work, such as by training my students to become instructors and by developing long-term partnership with local non-profits to have regular offerings with updated content. My research has shown peer influence in adopting security and privacy advice, and I believe such community-facing, community-driven efforts have the potential to generate scalable impacts as the people we teach become capable guardians for other individuals they know and care about.