

I am a woman pursuing a career in a field that is male dominated. It is a field within which I largely feel welcomed, something I credit to my great role models and mentors. I also credit a strong peer community: weekly lunches with Women in Computer Science and Electrical Engineering (WISCE), my experience on the planning committee for the 2018 Women in Tech event, and the many female undergraduate and graduate students I have worked with and mentored. I know from this community that there is still work to be done so that experiences like mine become the norm—many underrepresented groups remain marginalized within computer science and engineering departments. The importance of doing this work to promote diversity goes beyond gender to categories of race, socioeconomic status, disability, sexual identity, and intersections therein.

Towards the goal of increasing diversity in STEM, I volunteer in outreach programs to promote math and science education in elementary and middle schools. I have served as a tutor in Philadelphia public schools, science mentor in a Berkeley middle school, and outreach volunteer in East Bay elementary schools. These experiences have given me valuable opportunities to hear voices that I might not otherwise encounter, providing insight into injustices and barriers to diversity that I do not experience firsthand. This semester, I am working on curriculum development for a new course on Anti-Racism and Social Justice in EECS which will run for the first time in the spring. The goal of the course is to provide EECS students with an understanding of how historical, institutional, and individual factors contribute to bias and a lack of diversity within the technology industry.

Technology itself can exacerbate inequality and lead to homogenization. Concerns about these broader impacts motivate my research on fairness in machine learning and agency in recommender systems. In my research statement, I further elaborate on this work, which incorporates considerations of impact into the design of learning algorithms that interact with people. As a graduate student instructor, I worked to integrate topics of fairness and bias in machine learning into computer science curriculum.

My work is largely technical in nature, but I draw on ideas from fields like sociology and economics, since questions of society and technology are fundamentally interdisciplinary. I co-founded the student group *Graduates for Engaged and Extended Scholarship in Computing and Engineering* (GEESE) to give graduate students a constructive place to foster collaboration at the intersection between engineering and the social sciences and humanities. A key goal of ours is to cultivate a culture of disciplinary humility and openness towards diverse ways of knowing.

Future Plans Diversity is a key part of a vibrant academic community. While it is true that many barriers and sources of inequality fall outside the strict purview of a university, academic institutions are uniquely positioned to advance goals of diversity, equity, inclusion, and justice.

I look forward to supporting initiatives along three fronts. First, within the department, I will work to promote a welcoming culture. This includes mentoring students from underrepresented demographics and ensuring that student diversity groups have the resources to provide a sense of community. Second, across the campus, I will support or develop initiatives that promote disciplinary diversity in tackling problems of technology and society. Drawing on my experience organizing reading groups and panel events with GEESE, I hope to cultivate a network of students and researchers open to understanding issues from different perspectives. Finally, within the wider community, I will continue my record of engagement and support student-led volunteer outreach initiatives. As a professor, I will help to maintain continuity to strengthen connections between the university and the communities we serve. This is an important role—developing programs with long term relationships allows for deeper engagement and lasting impact.