

As one of few women in my high school AP Computer Science class, I experienced how technical spaces can exclude those who don't fit traditional molds; it was not until I took a course on Social and Ethical Issues in Computer Science that I realized how unfortunately cliché my experience was and realized that there was in fact a seat for me at the table. This drives my commitment to creating inclusive environments through concrete actions that expand access to computing. Building Academic Communities At New College of Florida, I founded and led the ACM student chapter, growing it from zero to 50 active members (8% of the student body). I established weekly study sessions, coding workshops, and social events designed to reduce barriers to entry. I personally introduced myself to every new attendee and connected students who expressed uncertainty about whether they belonged with appropriate mentors, friendly faces, and resources.

Expanding Research Access

As the invited Ph.D. selection committee chair for my department's Research Experience for Undergraduates in Software Engineering (REUSE) Program for three consecutive years, I prioritize applicants from smaller institutions who demonstrate interest but lack research opportunities. On the Software Engineering Ph.D. admissions committee, I evaluate candidates based on preparation and research vision rather than institutional prestige. In one case, my advocacy for a student from a smaller school over an MIT-affiliated candidate resulted in admitting someone who now conducts innovative research in our program.

Research Impact

My research touches on and quantifies barriers in technical communities. My ICSE 2022 Distinguished Paper on Toxicity in open source reveals the nature and characteristics of toxicity in open source communities. My work on contributor disengagement identifies abandonment patterns affecting those with multiple responsibilities, challenges that disproportionately impact women, caregivers, and people with lower socioeconomic backgrounds. This research provides actionable intervention points for creating sustainable technical communities.

Mentoring Outcomes

I have mentored 12 undergraduate researchers through REUSE (2021-2024), adapting approaches to individual goals. Kimberly focused on research fundamentals, namely: coping questions, reading papers efficiently, designing publishable studies, and winning first place in a student competition before pursuing her Ph.D. at CMU. Philip concentrated on industry skills, including innovation feature development and code review communication, to secure a role at Amazon. Lina, a freshman with limited exposure, benefited from daily meetings and co-working to build method selection and data collection skills, culminating in an ICSE NIER publication. Each student received personalized milestones, weekly check-ins, and visible progress markers.