

Diversity Statement

Penghui Li

Diversity, equity, and inclusion are essential to advancing education and research. As a first-generation college student, I have witnessed how diverse perspectives foster creativity, strengthen problem-solving, and build more resilient academic communities. These experiences will continue to guide how I teach, mentor, and collaborate with students and colleagues in the future.

Past Experiences. I have learned firsthand the importance of support and mentorship in helping students from diverse backgrounds thrive. As a first-generation college student, I navigated academia without family role models familiar with research careers. I was fortunate to receive guidance from advisors and peers who helped me understand the unwritten rules of graduate school, conference presentations, and academic networking. This experience gave me lasting empathy for students facing barriers due to limited resources, cultural expectations, or lack of representation, and motivates me to provide guidance that I once needed.

In teaching, I have worked with students across genders, nationalities, and disciplines with widely varying preparation levels. As a TA and guest lecturer, I adapted explanations for different audiences, using analogies from literature and social sciences to make technical concepts accessible. I designed small group exercises, coding workshops, and collaborative projects that helped students learn from one another and build confidence. These experiences reinforced that inclusive teaching means providing multiple entry points so all students can engage deeply with the material. I also work to create environments where students from minority and marginalized backgrounds feel empowered to participate fully. Many hesitate to ask questions for fear of judgment, so I establish norms where curiosity is welcomed and mistakes are treated as learning opportunities. This benefits all students while ensuring that those who face additional barriers are supported.

As a research mentor, I have guided 11 students from the U.S., Brazil, and other countries, including several women and students new to research. Josef Sarfati Korich, an undergraduate with limited systems background, gained confidence through structured mentorship to design experiments and present at lab meetings. Yunfei Ke came from a theoretical background and initially struggled with debugging large codebases. Through step-by-step guidance, he developed strong software skills and decided to pursue a Ph.D. Beyond individual mentoring, I have collaborated with colleagues across Asia, Europe, and North America. These colleagues brought perspectives that challenged my assumptions about research methods and problem-solving approaches, leading to more robust and innovative outcomes. Working with diverse students and colleagues taught me that creating inclusive environments enhances creativity, fosters resilience, and helps all participants achieve their potential. These experiences strengthened my conviction that mentorship is not only about technical training but also about cultivating a sense of belonging where every student can thrive.

Future Plans. As a faculty member, I will create inclusive and supportive environments where all students can succeed. I will foster classrooms where students with different preparation levels feel welcome, and I will highlight contributions from researchers of varied backgrounds so that students see multiple role models. In mentoring, I will actively support women, first-generation students, and historically underrepresented groups by connecting them with research opportunities, professional networks, and fellowship programs. Within my research group, I will build mentorship pipelines where senior students guide newer ones, reinforcing a culture of mutual support. I will also engage in outreach programs such as summer research opportunities for students from minority-serving institutions, workshops encouraging participation of women and underrepresented groups in computing, and collaborations with organizations promoting STEM access in local communities.

I view diversity as central to building resilient research teams where different perspectives spark creativity and collaboration. I will advocate for equitable admissions and funding policies, address imposter syndrome through peer support networks, and remain attentive to bias in research group dynamics. My mission is to mentor students in both technical skills and navigating academia with confidence, broadening participation in computer science, and helping create a research community that thrives on inclusion and empowers future leaders.