Diversity, Equity, and Inclusion Statement

GUANNAN WEI

I am committed to building a diverse and inclusive environment in teaching and research, because I deeply believe that every individual possesses the same potential for achieving academic greatness, regardless of their identities, races, genders, ethnicities, and more. As a computer scientist, my commitment is about making small but meaningful changes in our social constructs that impact how we teach and produce scientific knowledge of computing.

My belief in DEI is rooted in my own journey in pursuing a research career in computer science as a first-generation PhD within my family. My high school track (liberal arts) in China did not prepare me for STEM majors in college; instead, I initially was an undergraduate student studying Law. As much as I enjoy thinking about the philosophy of law, my true passion became evident after I explored functional programming in Scheme. However, as a Law student, I struggled to access relevant resources and seek opportunities to gain more experience in PL research. Even later, as an MS/PhD student in computer science, it remained challenging to find both peers and role models who share untypical paths similar to mine.

This experience reinforced my belief in the importance of lowering systematic barriers to enable individuals from diverse disciplines to embrace the study of computer science. Later during my PhD study, I contributed by volunteering to translate the *Software Foundations* series textbook into Chinese. This textbook is one of the best introductory materials in building correct and reliable software, and my efforts were aimed at expanding the access to this invaluable resource for a wider audience. I hope my effort inspires more students with non-traditional academic backgrounds to embark on a journey of learning programming languages.

While eventually I pursued a career in computing, the two-year experience as a Law student remains precious to me. It significantly impacted my understanding of DEI by instilling in me a profound appreciation for the importance of equitable, inclusive, and just systems. I came to realize that it is essential to advocate for and work towards inclusivity especially when the "status quo" of the system falls short of perfection. During my PhD and postdoc at Purdue, I mentored several female junior graduate students with underrepresented backgrounds. I provided support in navigating graduate courses, getting started with research ideas, offering feedback on paper drafts and presentations, and more recently collaborated on topics where I can contribute by leveraging my expertise in PL. In Fall 2023, I engaged in a four-week workshop on *Intercultural Diversity and Inclusion*. This experience further enhanced my communication and empathy skills, better equipping me to interact with individuals from diverse cultures, ethnicities, and identities in a professional setting.

Commitment for DEI in Teaching. When I served as a TA for the undergraduate-level System Programming course at Purdue, I strove to foster an inclusive environment where everyone feels welcomed. To ensure equitable success for all students in the class, I made extra efforts to assist students with marginalized backgrounds, including but not limited to those who are female, international, Hispanic, or Black.

If I am hired as a faculty member, I will continue the effort to foster an inclusive environment in classrooms, and make sure that all individuals have equal access to, engagement with, and participation in the exploration, discussion, and dissemination of knowledge. Moreover, I am committed to broaden the participation for marginalized groups in computer science, both within and outside the classroom (e.g. by organizing events for K9/K12 students). Another effort I will make is to practice *open eduction* [1], ensuring that course materials are accessible without any barriers.

Commitment for DEI in Research. During my PhD at Purdue University, I was fortunate to belong to a research group that showcased diversity, where my fellow students came from over 7 countries with diverse identities and ethnicities. This rich and diverse backgrounds contributed to the exchange of ideas and intellectual growth within our group.

Going forward, as a faculty member, I would recruit a diverse team of students, with a particular focus on those who are underrepresented or historically marginalized in the fields of computer science and PL research. I am also enthusiastic about offering hands-on research opportunities to undergraduates who are from non-dominant groups. When mentoring students, I will prioritize recognizing their individual research interests and building trust in the group. I will also strive to understand and improve the well-being of graduate students, such as by establishing regular meetings to address mental health and anxiety concerns.

REFERENCES

[1] Jan Hylén. 2006. Open Educational Resources: Opportunities and Challenges. (2006).