Diversity Statement

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I am firmly committed to improving diversity, equity, and inclusion (DEI) in computer science (CS). I draw upon my own experiences as a woman in computer science and from the experiences of other underrepresented groups to build a better understanding of the issues at the grassroots and act accordingly.

Building Peer-Network. A fundamental barrier faced by individuals of underrepresented groups is the lack of peers and mentors that relate to them in shared experiences of minorities. Personally, I have been fortunate to have had mentors who have a deep understanding of diversity issues. My mentors have supported me to attend workshops targeted at minorities to build a peer group with shared experiences. In addition to building a peer network, these workshops have made me realize that none of us is alone in our experiences even though most people in our professional circle may not share them. This has motivated me to assume personal responsibility and to take small yet meaningful actions to make CS more inclusive and welcoming to minorities. I reach out to incoming graduate students from underrepresented groups as a peer and encourage them to participate in and seek to improve the existing community infrastructure such as the CRA Grad Cohort for Women, CRA Grad Cohort for IDEALS, Grace Hopper Conference, and related events at leading conferences within their research areas. At conferences, I make a point to involve and invite junior students/researchers, especially women, in post-conference networking and socializing events.

The need for shared experiences also extends to international students. At Rice, I would help in orientation and acclimatization of incoming international graduate students. I would help them navigate their way in graduate school and also advise them on adapting to the new culture. As part of Prof. Moshe Vardi's group, I did the same for international visiting students to help them have a productive, fruitful, and enjoyable visit.

DEI in Higher Education. Creating opportunities for students, especially from underrepresented groups, is a step towards the broader goals of DEI. As part of the organizing committee of a two-day virtual Verification Mentoring Workshop (VMW) at Computer-Aided Verification (CAV) 2021, my DEI efforts were geared towards creating equal opportunities for students across barriers of gender and geographical boundaries. In addition, we also openly addressed the topic of imposter syndrome in academia.

One of our leading goals at VMW was to encourage the participation of women and underrepresented minorities. Our efforts led to ∼30% student participants who identified as female or non-binary. We ensured equal representation among our invited speakers and panelists as well: 6 out of 13 of our speakers and panelists identified as women. We made concerted efforts to reach out to students from outside North America, the EU, and the UK. As a consequence, ∼27% students were from countries including Egypt and Ethiopia. Having undergone higher education in India and the US, I recognize that concerns surrounding research vary drastically between students in the western and eastern hemispheres. To this end, we invited two interactive panel sessions, one for each hemisphere (eastern and western), to better address student concerns across geographical boundaries.

To emphasize on the mental and physical well-being of students, we invited a mentoring talk on imposter syndrome by Prof. Sukyoung Ryu (KAIST). This is a necessary discussion, as the research community is socio-culturally diverse, including members from backgrounds where such issues are largely unacknowledged. The session witnessed one of the most active participation in the workshop.

K-12 Outreach. In order to address the leaky pipeline in CS, I believe systemic actions in higher education have to be combined with the betterment of K-12 CS education. This is why I volunteered at the Science and Engineering Fair of Houston (SEFH) in 2017 and 2018. SEFH is a science exhibition-cum-competition for junior and senior high school students from 23 counties around the city of Houston. In addition to judging the CS category, I spread awareness about higher-education opportunities and careers in CS as several students I interacted with, especially outside of the CS category, perceived CS/programming merely as a hobby.

These outreach experiences have also made me realize that representation imbalance in CS is already visible at the K-12 level. Under the CS category, there was only one female student in the year 2017 and none in the year 2018. In both years, there was no student from any historically marginalized community of society. Universities can play a role in improving the first exposure of children to CS and make it more accessible and attractive to underrepresented groups. In the future, I am committed to working towards bringing change from the ground up through equitable practices that promote inclusiveness and diversity at the K-12 level.