DIVERSITY STATEMENT

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Diversity is integral to the excellence of a university. Diversity of race, gender, ethnicity, age, etc. encourages differences in thoughts and perspectives. A university with diverse students and faculties will benefit significantly from such differences. Previous research has shown that diversity increases productivity. In fact, as part of my research, I have studied gender and tenure diversity in various open source software development environments and found that both gender and tenure diversity are positive and significant predictors of productivity [CHI'15]. Therefore, I believe that universities must create a learning environment that promotes access and opportunity for all.

Unfortunately, Computer Science has a serious diversity problem. Researchers found that from 1980 onward there has been a sharp decline in the female to male ratio in Computer Science while other fields including Medical, Law, and Physical Sciences demonstrate positive trends [NPR'14]. As a female computer scientist, I can personally relate to these problems—most female and other minority students are often discouraged to choose Computer Science as a major due to social norms. In fact, based on interviews and conversations with Computer Science students and faculties at Carnegie Mellon University over a period of four years, Margolis *et al.* observed that a standard US family is much more likely to buy computers for boys than for girls [Margolis'03].

Thus, to increase diversity in Computer Science, we need to encourage students from the very beginning, even before they enter college. For example, the University of Texas at Austin (UT) organizes First Bytes summer camp to encourage high school girls in computing career. This program has helped to increase the student diversity in the Computer Science department in UT. I would like to introduce similar programs for both high school and undergraduate students. As a first step towards that, I, being the Vice President of Graduate Women in Electrical and Computer Engineering at UT, held several poster sessions and seminars to promote research among women undergraduates in the Electrical and Computer Engineering department at UT.

I have also mentored students with diverse backgrounds to conduct successful research. For example, I co-advised two female students: Connie Nguyen, an undergraduate at the University of California Davis and Lisa Hua, a graduate student at UT. I also mentored Abilio Oliveira, a visiting undergraduate student from Brazil.

Moreover, diversity goes beyond one's race or gender, especially in the classroom environment, and involves how the students think, learn, and communicate. In order to create an open and balanced environment in the classroom, I strongly encourage students to participate in group discussions, collaborative activities, *etc*. Such teamwork helps students communicate with classmates from various backgrounds, learn about different cultures, and appreciate others opinions; thus enriching the overall learning.

A career in computing gives me extreme satisfaction, since it not only challenges one to solve complex logical problems but also gives the pleasure to implement the solutions and observe the real-time benefits. I believe that every student, irrespective of his/her background, should get the opportunity to learn computing. I will, therefore, motivate all students, especially the minorities whose journeys were not easy to begin with, towards a successful career in computing.

References

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