DIVERSITY STATEMENT

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A recent study about student evaluations for teaching assistants (TA) in an online course at University of Florida showed that the female TA received lower evaluation scores and five times as many as negative reviews compared with the male TA [1]. The results came as a complete shock to me since actually they were the same person – the male TA was non-existent and the female TA was responsible for all students in the class. This gender bias reveals that there has always been a conventional stereotype that women are not as good at STEM related majors as men.

This reminds me of my experience during the middle school. Coming from a rural area in China, it was common to see that my female classmates dropped out one after another since their parents do not think it is necessary for girls to receive higher education, even if some of them showed talents in the STEM related courses. Looking back now, it is a traditional bias against women which deprives their rights of education and opportunities of pursuing their careers in STEM field. Thanks to my parents for their endless support, it is extremely lucky for me to have the opportunity to receive college education and become the first PhD student in the whole family.

In the STEM community, it is easy to see that there are also bias in many other aspects, such as social status, race, and religion, due to the lack of diversity. These prejudices are harmful to the development of individuals, departments, and even universities. Therefore, a diverse community is essential for people to realize and change these prejudices. **With this in mind, I strongly support promoting diversity in STEM community, especially in the computing area.** When I participated in the mentoring programs for women in computing, including CRA Women Grad Cohort workshop (CRA-W) and Grace Hopper Celebration of Women in Computing (GHC), I found there are a number of people who are dedicated to promoting diversity in the community. I am excited to join them and make efforts in the following aspects to contribute to the diversity in STEM.

1. **Motivating young generation to learn STEM:** My experience as a mathematics tutor for two high school girls during my university study made me realize that many students (especially girls) lack proper motivations and fail to discover their potentials in the field of STEM. They believe that STEM related courses are boring and difficult to learn, which scares them away from the STEM path when selecting majors in colleges. One of the primary reasons is that it is difficult for the students in undeveloped regions to access to the education resources about science and technology and experienced teachers with STEM knowledge. Therefore, as an educator and researcher in computer science (CS), it is important to popularize the STEM-related knowledge and build students’ confidence in pursuing their career in STEM filed. I plan to make efforts through 1) participating in motivation programs for girls and their parents, 2) promoting various instruction forms of STEM education in K-12 curriculum, including courses, hands-on experiments and activities, and 3) organizing training programs for STEM teachers in K-12 education.

2. **Organizing and serving in mentoring programs:** I really appreciate the opportunity of participating in the CRA-W workshop at the early stage of my PhD study. It provided me a platform to get professional guidance in finding research topics, improving presentation skills and building the career paths, which helped me build the confidence to pursue an academic career after graduation. Recently, I received a lot of professional guidance about the academic job searching in the mentoring session of Women in Machine Learning Workshop (WiML@NeurIPS 2020) and Widening NLP workshop (WiNLP@AACL 2020), organized specifically for women and other underrepresented groups. I can clearly feel the importance and influence of this kind of mentoring programs on the career choices of STEM students like myself.

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Therefore, I volunteered to serve as a poster mentor to provide research advice to a junior student at WiML@NeurIPS 2020 workshop. In the future, I will continue my efforts in several areas, including 1) actively organizing and serving in workshops for women and underrepresented groups in computing related conferences, 2) organizing seminars in the CS department to provide research guidance and career advice to women students, and 3) participating in the events and programs for promoting diversity in computing, such as AnitaB.org and ACM-W.

3. Recruiting women students: I realized the gender bias and the real need of diversity in STEM community when I found that the number of female students was only about half of the number of male students during my undergraduate study in Statistics. By the time of graduation, it was also brought to my attention that female students performed better than male students on average, which indicates that women also have the abilities to succeed in STEM field. As a female student, I am extremely grateful to my adviser Dr. Chandan K. Reddy for providing me the opportunity to pursue my PhD in computing, the guidance in conducting independent research, and the encouragement in the graduate studies. In the future, I will recruit women students in the research group and guide them in the study and career choice in the field of computing. I also plan to provide internship opportunities to women students who are in their early stage of computing but are interested in pursuing careers in the computing community.

Looking back, with the endless support from my parents and the valuable help from the computing community, it was a challenging but rewarding journey for me to pursue my dreams in STEM. Looking ahead, as an educator and researcher in CS, it is my responsibility to contribute to and advance the diverse environment in STEM. With our joint efforts, I hope that we can build a more friendly and inclusive STEM community for women and other underrepresented groups.

References