Diversity Statement

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I believe that it is of great importance to provide every student with equal opportunity, regardless of race, ethnicity, or gender. Being an Asian woman, I deeply understand the obstacles faced by women and other minorities, and I am determined to devote myself to facilitate diversity and equity in universities. As a researcher with broad research interests, I have also worked on diverse research topics and areas and even interdisciplinary fields. I believe that diversity is important to both education and research. In the following sections, I will first present *my own experience of overcoming the obstacles faced by women and minorities*, and then introduce *some of my experience on helping female and minority students*. I have also *participated in several enjoyable and rewarding activities for women and minorities*; I will introduce these activities in Section 3. I will briefly state how I *address diversity in my research* in section 4. Finally, I would like to present my plan on how to contribute to diversity in my *future plan*.

1 Overcoming Obstacles Faced by Women and Minorities

When I was an undergraduate student at Tsinghua University, I was one of the 20 women students (out of a total of 120 students) in the computer science department. Even though the department has attempted to provide equal opportunities for female students, I have still experienced or witnessed other women students' experience of being discriminated against, explicitly or implicitly, intentionally or unintentionally. For example, since there are too few female students, in many student organizations in our department, there was no female member. As a result, many decisions they made had not taken the concerns of the female students into account. Another example is that sometimes the male students organized spontaneous study groups in the dormitory, where students review and discuss the materials of courses together. In the study groups, students with better academic grades were also invited as lecturers to help those with difficulties in understanding courses. These activities helped improve students' studies. However, because of the gender-based dormitory buildings, female students may be unaware of such activities. The lack of communication further adds difficulty to the studies of female students. Also, when doing course projects, many groups were reluctant to add female members since such addition leads to extra costs with respect to communicating, and female students were believed to be less likely to endure the heavy workload of engineering.

Despite the obstacles, I worked hard in my studies, actively participated in a number of social and academic activities, and served as a member or leader in many student organizations. From the efforts I made, I achieved good academic grades and my social work was highly recognized by other students and faculty members in our department. I believe that **my experience provides strong evidence that women students can achieve success and develop a career in computer science which they can be proud of, both socially and academically**.

In addition, I **sought solutions to these issues faced by female students**. I **closely worked with other female students in many course projects**, which were always the top-tier projects and obtained high scores. I also believe that the study group is a good activity for improving students' studies, and I have therefore suggested to make it available to more students. I advised the male students to make official announcements of the study groups to everyone. By doing this, **more under-represented students, including female and international students, become more involved in such activities**. Myself, as well as other female students, were then also invited as lecturers of the study groups. It turned out that **both male and female students benefit from these communications**. In my social work, I devote myself to improving the voices of female students. I raised suggestions to leaders in the Student Union regarding paying attention to female students' requirements when they organized several activities. I also **wrote a series of short stories on social networks reflecting the lives of female students in CS**. The series of stories were popular and well received, receiving thousands of views and hundreds of shares. These stories helped male and female students know more about each other.

Also, as an international student in the US, I once experienced challenges and confusion caused by language, culture, customs, and lifestyle. Through many events and activities, I made friends with people from all over the world, and am happy to also have had the opportunity to help other people know more about China. Communicating with others has allowed me to adjust to life in the US more rapidly.

2 Helping Female and Minority Students

I have also volunteered to help women and other minority students through many approaches. During my undergraduate studies, I have served as a member in Bauhinia Mailbox, a non-profit student organization that **responds to mail and emails from high school students nationwide**, answering their questions related to studies, daily life, and emotions. I have **responded to more than 50 letters** from students from all over China, many of them from female students or students from poor families. Through these letters, I saw that in many families in China, the "son preference" still exists, which means that parents believe boys to be more important than girls. Also, students in China face significant pressure due to the college entrance examination, particularly for those from poor families because education provides them with opportunities to secure a better future. I tried my best to understand their plight and encourage them to keep optimistic. I have also provided suggestions to their problems and motivated their aspiration to campus life. **Many of them received admission to their ideal universities afterward, and I am proud of having encouraged them**.

In the department of my undergraduate program, the freshman female students will be assigned one or two junior female students as mentor(s), who will volunteer to help them in studies, daily life, and career development. Recognized for my good academic grades and social work experience, as well as being enthusiastic to help others, I was recommended as a **mentor for female students in the class of 2012** (14 female students). During that time, I paid close attention to the development of the female students. I spent **approximately 4–5 hours per week** working on related affairs. My responsibilities include organizing events to help the students bond with each other and enjoy campus life, talking to them when they faced challenges in their studies and daily lives, providing suggestions or resources when they needed help, reflecting their difficulties and concerns to the department, and so on. I also have recommended them to suitable positions both in student organizations and in internships. I believe that I have helped the female students in building their confidence and providing advice regarding their career development. **The students I mentored have all achieved successful careers**. Some of them have been admitted into top universities including CMU and UC Berkeley for their graduate studies, and some of them are now working for top IT companies such as Google.

I have also helped many international students in their graduated school application and adjust to new lives abroad. Because of the difference in application process, many good international students do not know how to develop good materials in their applications. This might make them miss good opportunities of being admitted to top universities. I have **given advice to many international undergraduate students** when they were applying for graduate schools in the US. During my Ph.D. years, I have also **helped many new international students to helped them to adjust to new life in CMU**.

3 Participating in Activities among Women and Minorities

I have also participated in many activities aimed at facilitating communication among women students at CS, including Rising Stars, an academic career workshop for women in EECS, and some IT salons for women in Tsinghua and Women@SCS in CMU. Through these events, I have got to know many excellent female students and researchers in various areas. From my own experience and the wonderful women and minorities I know, I believe that women or minority students can achieve successful and proud careers in computer science, and I am willing to offer opportunity and guidance to female or minority students in the future.

4 Pursuing Diversity in My Research

I have also put emphasis on diversity in my research. I have **worked on various fields in computer science**, as well as **interdisciplinary research**, including parallel computing, theory (algorithms/data structures), computational

geometry, software engineering, databases, data mining (graph mining), and computational biology. I have closely **worked with researchers in different fields**. These collaborations have broadened my horizons, leading me to many interesting research topics and results. I deeply believe that communication and collaboration between areas are beneficial to the development of science, and I will continue collaborating with people in different fields and seeking research problems in interdisciplinary fields.

In the past, I have also **collaborated with people from different backgrounds**, including many wonderful women (e.g., Tijana Milenkovic and Naama Ben-David) and minority (e.g., Joseph Crawford) researchers. The collaborations have all been successful, leading to published papers and papers in preparation. In the future, I would like to continue collaborating with people from diverse backgrounds.

5   Future Plan

I believe that all people, irrespective of race, ethnicity, gender, or from different backgrounds, should be provided with equal opportunities, and that they all have the potential and ability to achieve successful careers. In my future teaching and mentoring, I hope to **encourage students to work in diverse groups and to build a research group consisting of people from different backgrounds**. I believe that diversity drives innovation through inclusion and communication. I believe that communication with people from different areas and disciplines can bring up new perspectives and will spark new great ideas.

In teaching, I will consider and **address the challenges faced by diverse student audience**, like non-native speakers, students with different backgrounds and pre-knowledge, and students with different expertise. I also would like to **encourage students from other departments to take my courses**, and *develop their interest and skills in computer science*. I would like to encourage them to apply the useful techniques (algorithms, programming, etc.) they learned in my class to their own disciplines. I am also excited about seeing myself or my students collaborating with them.

I would like to **communicate closely with students, understand each student's special needs, and adjust my teaching and mentoring through communication**. I am also enthusiastic about participating in **volunteer activities** aiding female and minority students in my future career.

I believe that diversity brings vigor and vitality to the teaching and research environment, and further leads to fruitful results. In the future, I would like to take an active role in furthering and strengthening diversity.