Diversity Statement   Xuan Wang

I am committed to making the communities I belong to more **diverse** and **inclusive**. As a **female researcher** in computer science, I am often considered a minority since the gender bias in CS is still severe. I also encountered challenges brought by **switching disciplines** and being in a new environment with an unfamiliar culture. At the same time, I came with a **highly interdisciplinary background in biology, chemistry, statistics, and computer science**. My research also greatly benefits from **interdisciplinary collaborations with experts in various fields**, such as biology, chemistry, and health**.** From my own experiences, I understand some challenges and the benefit of diversity. In the future, I will actively engage in diversity-focused efforts, and I will support my students and other researchers in similar endeavors.

An important aspect of creating an inclusive and supportive community is **breaking the stereotypes** and **being an active community member**. One stereotype is that "women lack leadership, in either academia or industry". However, during my Ph.D. study, I have met and talked with great women researchers, mentors, and leaders, representing more senior roles in academia and industry. It has greatly inspired and encouraged me to pursue a career in computer science and helped me envision my future in academia. Another stereotype is that "men are growing less likely to collaborate with female researchers". However, I have also met and collaborated with many male mentors and collaborators who are extremely friendly and supportive of women students and young researchers. Moreover, the stereotypes are not only associated with gender but also with culture, race, nationality, and others. I am happy that I was not held back in pursuing my career goals because of these intimidating images. To break stereotypes and build an inclusive and supportive community, I aim to be an active, visible contributor to my communities, not just at diversity-specific events. I have attended the "**1st Global Women in NLP**" workshop at the EMNLP'21 conference. In the future, I plan to actively organize and serve on social events that are marketed to broad audiences to support the underrepresented groups. For example, I plan to organize and participate in workshops in top-tier natural language processing conferences (e.g., ACL, EMNLP, and NAACL) on "Women in NLP/CS/STEM". I also plan to organize and participate in outreach activities with K-12 and high school students, aiming at diversifying participation in computer science, STEM, and research.

Another important aspect of embracing diversity is to **understand and respect everyone's background**. I came from a **highly interdisciplinary background** in biology, chemistry, and statistics before joining the Ph.D. program in CS at UIUC. At the beginning of my Ph.D. study, I am unconfident in taking on research projects or collaborating with others in CS. However, I have received numerous encouragement and strong support from my Ph.D. advisor and other professors in the department. They help me tackle the ambitious research projects that are well aligned with my long-term research goals. I have also had insightful brainstorming discussions and collaborations with other graduate students in our department that greatly benefit my research. In addition, my research also greatly benefits from **interdisciplinary collaborations with domain experts in biomedicine, chemistry, and health**. We have opened exciting new research directions and achieved great progress with an open mind for diverse viewpoints and good communication skills. For example, I collaborated with UC Davis Medical School to develop a text mining method that identifies cardiovascular proteins specifically associated with six sub-categories of heart diseases. This method enables a **precision medicine** approach to find new forms of treatment for patients with preserved ejection fraction (HFpEF), which has led to a **recently funded $1.5 million NIH project**. I believe that including diverse viewpoints is a critical way of countering the existing biases in what research directions we pursue as a field (i.e., a way to do better science). In the future, I plan to continue the interdisciplinary collaborations with researchers from various backgrounds to solve real-world problems. I also plan to teach and mentor students from diverse backgrounds, both **within and outside computer science**. I will encourage and support my students to identify and pursue research directions based on their interests and backgrounds. I will also encourage and support my students to communicate and collaborate with others from various backgrounds.