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Diversity Statement

I am a Chinese national who has lived in eight cities, in three countries, and on three continents in the past ten years. In those ten years, I have had some experiences as a member of the social majority, but most of the time, I have been a minority member, contributing to and also exploring the new environment's diversity. My personal experiences helped me to appreciate the value of diversity, which I aspire to promote through my teaching, advising, and research endeavors.

Born in Shanghai, a metropolitan area with a population of almost 30 million, I have experienced a great deal of diversity since my childhood, but of course, from the point of view of a native majority member. As the most well-developed city in China, Shanghai has not only attracted millions of people from every province in China, but also tourists, visitors, and permanent residents from all over the world. One can simply imagine Shanghai in China as New York in the US, a vibrant city that is fused with different elements. In Shanghai, you can hear all kinds of Chinese dialects and enjoy authentic regional food from any other part of China. The booming economy of my hometown is largely contributed by people of different regions, ancestors, ethnicities, skin colors, and values. However, I do remember the conflicts between the locals and the so called "outsiders" in my childhood: the local majority complains about the exploded population, overburdened public resources, overcrowded living situations, and worsened natural environment. As a kid, but most importantly, a member of the majority group, I didn't feel the severity of the negative effect of discrimination on those minority groups.

Moving to Aachen, a small German town on the boarder of Germany, Netherlands, and Belgium, I transitioned from the majority to the minority group. Fortunately, Aachen is a college town populated by students from everywhere in Germany, in Europe, and even from the entire world. Although being the only non-German student in most of my classes and the only Chinese student in others, the diverse environment in Aachen did not make me feel lonely. I made many European friends from the Erasmus program, Korean and Japanese friends from my home continent Asia, and even some American friends from a different third continent. I learned German, I realized my Spanish friends were proud of their "siesta", I watched Polish dances, and I tasted Czech beer. Most importantly, I was influenced by the diverse culture in Aachen and I decided to pursue graduate school in the most diverse country in the world, the United States of America.

Before moving to the US, I also spent one semester in a tiny German town, Blomberg, for my internship. I was very confident that I was the only one or two Asians in that whole area. Although I enjoyed the quiet and peaceful rural life there, the lack of diversity often made me homesick. Other than calling my parents on the phone, from time to time, I had to drive back to Aachen to visit my international friends there. That is the first time I realized the negative emotional effect of being the absolute minority in a social context.

After I moved to the US for my master's and Ph.D. degrees, internships, and post doctoral job, I have lived in five different cities, including Pittsburgh, PA, College Station, TX, Redmond, WA, Sausalito, CA, and Austin, TX. Again I have been a minority member on this third continent that I have lived on. The diversity in the US is in a whole other level. Interestingly, although I am a minority in daily life, as a male, I belong to the dominant majority group in my field, engineering or robotics. Fortunately, I was able to pursue my Ph.D. under my advisor, Dr. Robin Murphy, who is a female pioneer in the field of search and rescue robotics. Deploying robots in after-disaster scenarios was commonly perceived as a stereotypical male-dominated endeavor, but Dr. Murphy has completely changed my mind: I followed her to the response of Hurricane Harvey and Irma; we drove back and forth to Washington state and Florida from Texas to transport and deploy robots; and we camped out in our mobile lab during Irma response when there was no electricity or clean water available. Her dedication to her work and her resilience when facing not only intellectual but also physical challenges impressed everyone working with her. As one of the *30 Most Innovative Women Professors Alive Today* by The Best Master's Degrees website, Dr. Murphy also largely promoted diversity in our lab, actively recruiting and advising female African-American and Hispanic students to work on robots. Dr. Murphy's engagement in creating diversity in our lab also gave me the opportunity to work with many talented undergraduate and graduate students from minority or underrepresented groups. Being affected by her own example and her pursue for diversity, I am also an advocate for minority groups in the field of

robotics.

To be specific, I plan to organize interactive robotics workshops featuring real working robots, with the focus on encouraging female, African-American, and Hispanic students to become future roboticists. I believe physical robots working in the real world can be an effective platform to spark interest and to engage students in those minority groups into the field of robotics. Those real-world robots can be demonstrated to them as a result of my robotics research with a specialization in locomotion, which has yielded robot platforms and algorithms robustly deployable in the real world. My problem-driven teaching strategy can also engage minority students to look “under the hood” of those moving robots. Through increased curiosity stimulated by real robots and appropriate guidance, those underrepresented groups can be led into the broader field of engineering, such as Mechanical, Electrical, Aerospace Engineering, and also Computer Science.

My own personal experiences of being switched back and forth between the spectrum of majority and minority in a social group for my life and my career, has helped me to appreciate the importance of a diverse environment and the value it can bring to our life and work. One important reason of applying for an academic position is because I believe teaching, advising, and research is another great opportunity to encourage minority groups to acquire access to higher education, get more involved in every aspect of our lives, and eventually contribute to the diversity of our entire society.