CONTRIBUTIONS TO DIVERSITY

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My family's journey as transplants to North America and my upbringing in a region with a collapsed economy exposed me to communities that have suffered hardships, and sensitized me to the challenges faced by visible minorities, people from economically disadvantaged backgrounds, first-generation college students, and students with non-technical backgrounds retraining for careers in technology. I also know first-hand the challenges faced by women in technology. Furthermore, as a scientist and engineer, I know that breakthroughs in emerging interdisciplinary areas such as the Internet of Things require a true diversity of thought that can only be achieved when all voices are heard, all life stories reflected, and all opinions valued.

I actively promote diversity and inclusion in my research group and within the broader scientific and technical communities, contributing to and leading multiple related initiatives. **Aspects of my contributions to diversity have been recognized with a Google Anita Borg USA Fellowship**, which is awarded yearly to only 25 students across all levels of studies and across all computing-related disciplines nation-wide based on academic performance, leadership, and **impact on the community of women in technology**.

Within my research group, I proactively recruit and promote women, visible minorities, and students from economically disadvantaged backgrounds. At Princeton University and Columbia University I have already recruited, supervised, and mentored more than 15 female, Hispanic, black, and Native American students. I also mentored several people that were retraining for careers in technology and several students from economically disadvantaged backgrounds. For example, via a Columbia University partnership with Harlem Children Society, I supervised summer research terms of 2 high school students from under-served inner-city New York City communities. As a faculty member I will continue recruiting and mentoring students with diverse backgrounds, and will continue participating in initiatives that partner universities with under-served communities.

I am contributing to and leading initiatives that create strong wide-reaching support networks between the members of under-represented groups. For instance, I was an invited participant at the **MIT Rising Stars in EECS** event that aims to create a network of top graduate and post-doctoral women in Electrical Engineering and Computer Science. I also participated in the *Google Graduate Researchers of Diverse Backgrounds CS Forum*, which brought together graduate students of diverse backgrounds from different parts of United States and Canada. I am also currently serving on the board of the field-specific Networking Networking Women (N^2 Women) organization that develops and strengthens the community of female researchers in communications and computer networking.

As a faculty member, near-term I will actively lead the development of networks between the members of under-represented groups that work in my core research areas, Internet of Things and Fog and Edge Computing. Over the last three years I have been chairing the Internet of Things track of the ABI Grace Hopper Celebration of Women in Computing, which is attended by over 15,000 female students and professionals (**the ABI GHC Internet of Things track I chair is attended by more than 5,000 women**). I will leverage the diverse global network of female professionals that I have formed via chairing this track (this network includes TPC members, invited speakers, and invited session chairs), as well as via my other activities, to form and grow a community that will involve faculty, students, and leaders of the industry.

Longer-term, I will also actively contribute to and lead the development of programs that help economically disadvantaged students and students with non-technical backgrounds retraining for careers in technology, many of whom belong to under-represented groups. To address the needs of these student groups, the programs will focus on inclusive and personalized approaches to education (e.g., making sure that the students do not feel "on the outside looking in", understanding that students have varying skillsets), and on providing students with clear roadmaps to near-term economic stability (e.g., by actively involving industry in demonstrating the near-term and long-term value of the degree and in providing a wide range of flexible work placement and internship opportunities). I expect these contributions to partially build on my planned work in innovation in engineering education and on my work in building communities that span industry and academia.