

As an educator, I am committed to promoting diversity and inclusion in the STEM fields. Throughout my career, I have been doing so in my research, mentoring, and service.

First, I myself have experienced a huge cultural shift moving from China to the United States seven years ago. As an international student, I deeply understand and appreciate the differences between cultures and individuals. I strongly support fostering an environment where people from diverse backgrounds can safely communicate with each other and better understand each others' perspectives.

Second, I am devoted to promote diversity through research. People with disabilities are currently underrepresented and underserved in the STEM fields. As I discussed in my research statement, I have been creating and studying assistive technologies for people with disabilities on many fronts, including making physical interfaces such as public kiosks and flat touch panels accessible to people with visual impairments [C.9, C.11, C.19], improving blind navigation on unfamiliar environments or frequent routes [C.13, A.3], making digital content such as images and screenshots more accessible [C.12, C.16, C.17], as well as promoting fairness of AI systems for people with disabilities [W.9]. Throughout my research, I have been working with hundreds of people with disabilities as students, researchers, participants, and users.

Third, I thrive to make broader impacts from my research through deployments and entrepreneurship. My Zensors++ research and deployment efforts [C.14] have directly resulted in the startup Zensors Inc. (zensors.com), and is predicting wait times for Pittsburgh International Airport ([news](#)), tracking parking usage for Pittsburgh Parking Authority, and monitoring resource utilization of co-working spaces. I have also been recognized with several entrepreneurial and invention awards, including the CMU Swartz Innovation Fellowship, the McGinnis Venture Capital Award, and the NSF I-Corps @ CMU Program. For my work on VizLens to make physical interfaces accessible for people with visual impairments, I am currently working on deploying it to benefit blind people in their everyday lives. These experiences have made me a better researcher, in shaping my ideas, and steering me to focus on creating value and making impact.

Fourth, I am also committed to promoting diversity through teaching and mentoring. Among over ten students I have mentored, five are female (four undergraduates). The students I have mentored had diverse backgrounds, and many of them moved onto graduate programs, as well as industry jobs in design, software engineering, consulting, and research. Throughout my career, I have also worked to bring STEM education to people in underrepresented communities and other disciplines. During summer 2018, I worked with the Codetalk program of St. Joseph Center in Venice, California ([link](#)) to mentor and help low income, underemployed and underserved women pursue entry level positions in the technology sector. In Pittsburgh, I have attended many local government programs such as the OVR STEM Career Expo ([link](#)) to engage people with disabilities (including many high school students) about the accessibility research we conduct at CMU, in order to inspire them to pursue a STEM career. Additionally, I have served as mentors for the Georgia Tech Mentor Jackets Program and others informally through social media, to guide many students on pursuing careers in HCI and computer science.

Finally, I have contributed to diversity and inclusion through service. For instance, I served on the program committee of ACM COMPASS ([link](#)) for the past two years, promoting work that supports the growth of sustainable societies worldwide, especially for underrepresented and marginalized communities. I have also served as the web chair of ASSETS 2019 ([link](#)), and made sure the website is accessible for screen reader users. Working with other organizers, for the first time, we made posters accessible by providing audio descriptions and captions.

As a faculty member, I will continue my efforts in promoting diversity and inclusion, both within the institution and in the broader community, through research, teaching, mentoring, and service.