Alex Mariakakis Diversity Statement

I have realized that systematic social injustices have put me, an upper-middle class, white American male, at an unfair advantage. Given my privilege, I consider it my responsibility to actively promote diversity and engage in diversity efforts to help others who have not been so fortunate. Diversity is not just a duty to me, but also a benefit and a joy. Diversity engenders innovation by sparking new ideas, making it a key ingredient to a successful and enjoyable academic community.

A Google-Gallup report in 2016 highlights that underrepresented populations receive less exposure to computer science than their peers and are thus less likely to pursue such classes [1]. I believe that ubiquitous computing (ubicomp) and human-computer interaction (HCI)—subdomains grounded in relatable applications—provide compelling motivation for people to pursue careers in computer science. I initially learned about ubicomp and HCI through an undergraduate research program, an opportunity that was only available to a select few. I have made it my goal to give young people more accessible opportunities to learn about these subdomains. In doing so, I hope to foster more diversity in the next generation of computer scientists, engineers, and designers.

Part of how I have pursued this cause is through my mentorship of three high school women over the course of my graduate career. One of those students contacted our lab for help with her own class project on using smartwatches to track Parkinsonian tremors. With the help of my mentorship, she submitted her project to the Intel International Science and Engineering Fair and received 3rd place in the Biomedical Engineering category. She and another student I mentored received awards for their work from the National Center for Women & Information Technology (NCWIT) in the state of Washington. I have regularly presented our lab's work at NCWIT events, and I have actively encouraged NCWIT awardees to pursue research either with our lab or others. As a professor, I plan on starting my own high school mentorship program and advertising opportunities for women and other underrepresented minorities in local high schools.

I have also regularly led our lab's demonstrations at the University of Washington's Dawg Bytes and Discovery Days (link), outreach programs that expose K-12 students to computer science and engineering experiences. Through the CS4HS program, I have led lectures for high school teachers that discuss how computer science and technology can be combined with the natural sciences and mathematics to form interesting applications they can present in their classes.

I have had many opportunities to present my work through the press and to leaders in my field on account of my privilege as an outgoing native English-speaker in applications-focused research. I have tried to use my power and privilege to help others from diverse backgrounds gain exposure for their work. One way I have done so is through the creation of the DUB Doctoral Colloquium (DUB DC, link). Students at the University of Washington often have to compete with one another to attend doctoral colloquia at top HCI conferences; furthermore, some students have financial constraints that preclude them from applying to doctoral colloquia in the first place. I originated the idea of a doctoral colloquium specific to DUB—a grassroots organization for people who are broadly interested in HCI across the university—as a way for local graduate students to meet academic and industrial panelists without travel or cost. My fellow DUB graduate student coordinators and I organized and ran the inaugural DUB DC in 2017, and it has been an annual event since.

Another way I have helped others showcase their work is by serving as a mentor for the UbiComp Broadening Participation Workshop (link). The workshop provides an inclusive environment where students from traditionally underrepresented groups can present their work to more experienced members of the ubicomp community. The students taught me about the research problems relevant to them, such as rickshaw driving assistance and environmental sensing. In return, I connected them with mentors from my past industry internships who I felt would be interested in their work.

My approach to diversity echoes my pedagogical philosophy: students are more likely to enjoy and succeed in their careers when they are surrounded by opportunities to explore different options. I have promoted diversity throughout my career, and I look forward to continuing these efforts in the future.

1. Google-Gallup. 2016. *Diversity Gaps in Computer Science: Exploring the Underrepresentation of Girls, Blacks and Hispanics*.