

# Diversity Statement

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Computer science as a field faces an uphill battle toward creating a truly inclusive and equitable research community. Earlier this year, Black in Computing released a call to action addressing the many structural inequities facing Black researchers in computer science. In machine learning, the community at-large has only begun to grapple with the implications of machine learning technologies for underserved groups. As a faculty member, I will work to create an inclusive and welcoming environment for my students, ensure that my teaching reaches a broad audience, and consider the effects my research has on society.

As a mentor, I commit to creating a healthy, supportive, and affirming lab environment for all of my students. I will work to proactively check in with students and to be a safe place for them to voice concerns. I will advocate for them as employees and I will do my best to ease the many structural and administrative barriers that place undue burden on students from underrepresented groups. This includes ensuring that students are not taking on temporary debt to pay for conference travel and fees, avoiding an overreliance on GRE scores when evaluating graduate student applications, and setting an expectation of regular work hours to respect students with families. Finally, I will do my best to mentor students from diverse backgrounds which means being actively engaged with groups such as WiML, Black in AI, and Queer in AI, and seeking out students with non-traditional or non-computer science backgrounds.

As a teacher, I commit to reaching students beyond the classroom. While in graduate school, I volunteered for both the Women in Engineering and Computing Career Day and the Eureka! summer program. Both programs brought middle school aged girls to campus to participate in a variety of STEM classes and workshops. As part of the Eureka! summer program, volunteers were responsible for teaching basic programming ideas in small groups using the Scratch programming language and I hope to build my own versions of these workshops in the future. Another form of outreach that I feel strongly about is prison education. Education is one the most powerful tools we have to empower incarcerated and formerly incarcerated people. I am currently undergoing training to tutor as part of the Goucher Prison Education Partnership which offers undergraduate degrees to inmates in Baltimore area prisons, and I hope to remain involved in similar programs in the future.

As a researcher, I commit to considering the impact my work has on underserved groups and society at large. My research focuses on developing technological solutions to improve healthcare. Technologies such as telemedicine have great potential to reduce disparities in health outcomes; however, there is also substantial risk that technological solutions may reinforce existing health disparities or create new ones. Although many researchers in machine learning for healthcare are beginning to grapple with this problem, the formalizations of algorithmic fairness proposed in the machine learning community often fail to fully capture the complex ways disparities in health outcomes can arise. In ongoing work, myself and colleagues are working to create a conceptual guide to help data scientists and machine learning researchers assess whether deploying a machine learning system in a healthcare environment will lead to inequitable distribution of healthcare resources or disparities in health outcomes. We attempt to take a holistic view of the system, the healthcare environment and patients it serves, and the

healthcare providers using the system. As a researcher, I will (1) continue to develop my understanding of the ways in which health technologies impact health disparities, (2) make fairness and equity a standard part of algorithm evaluation, and (3) advocate for this type of consideration in the broader machine learning community.