## **Diversity Statement**

My role as an instructor, mentor, and researcher provides opportunities to create a welcoming space for all students, including those who have not historically had access or been represented.

**Access:** I am a middle-class male whose parents had graduate training, and so my circumstances have allowed me to take risks that would have been difficult for those less privileged. This social positioning provided me access to some of the world's most prestigious universities as a student and researcher and has prevented me from experiencing many of the difficulties encountered as a first-generation college student, for example. Because of this, I believe that I have an obligation to support students as an instructor and mentor by providing the *information, access, and guidance* necessary for success. My experience leading a series of 6 extra-curricular interviewing and networking workshops at Cornell and assisting more than 10 undergraduate students with graduate school applications is a testament to my commitment to addressing these disparities.

**Representation:** I have benefited a great deal from being mentored by strong female role models, such as my Ph.D. advisor and my mentor at Cornell, and my extensive interdisciplinary and international collaborations have shown me the scientific benefits of working with a diversity of scholars. I will strive to create an environment in which students of all genders and backgrounds feel welcome to explore STEM topics, especially early on in their studies when high attrition rates have been observed. Through a 6-week mentoring workshop at Cornell, I developed skills to combat some of these barriers by creating intellectually safe environments through empathetic listening, focusing on inclusive communication and teaching, and dedicating time to student conversations.

Career assistance: As an international graduate student coming to the States, I observed how many career pathways outside academia are closed off to students who are unaware of their options, whose connections are limited, and who do not have the extra-curricular experiences that are required when seeking employment. As a leader of campus organizations focused on consulting at Penn and Cornell, I made diversity a key part of our recruitment efforts, leading to the greatest number of universities and backgrounds represented in our annual case competition. The lesson I have taken from my experience as a consultant is the spirit of "pay-it-forward": an enduring sense of obligation to help others succeed, just as others spent their time to help me with the same ethos. I believe in helping students achieve success on their terms, giving them the information and freedom to reach their own conclusions, and supporting their decisions. I will foster links with existing local resources for this undertaking.

Community service: I will strive to serve the local community, as well as my students. As a graduate student in Philadelphia, I was deeply affected by the problems of the city's school district (SDP). Students were failing exams because they did not have access to books, even though those resources existed in closets and abandoned schools. Our team of 4 liaised with the SDP, school principals, and teachers for over 6 months to understand their perspectives and realized that the SDP's asset-tracking system had not been upgraded since the 80's due to funding shortfalls. We created a simple optical character recognition-based asset-tracking app (SmartTrack) that teachers could use to monitor their classroom materials, at no cost to them. Our project won the Penn Public Policy Challenge and came second at the Fels National Challenge, business plan competitions for social impact ventures. Our system is now in use in Camden (NJ) and Philadelphia schools, helping students perform to their full potential.

Increasing access, representation, inclusion, and community service are central to my scientific program and will play an integral role in my research, outreach, and hiring decisions.