This statement reflects my growing experiences about the lack of diversity, equity, inclusion, and justice. Coming from a lower middle class income family gives me the necessary perspective of understanding under-represented and under-privileged students to get into computing.

I was utterly lost when I took Computer Education in class 12, as I was the only one without a theoretical background. I was hesitant to interact in the class as the basic concepts eluded me, whereas the instructors assumed that I had a background just like everyone else in that course. However, three good friends helped me catch up by giving me private lessons after each class. This experience made me realize that students from diverse backgrounds often face challenges due to limited exposure to technical knowledge due to circumstances beyond their control.

I noticed that similar problems exist even when learning about research. To elaborate, I faced the challenge of learning about software engineering (SE) research on my own during my masters back in Bangladesh, as I was one of the first batch of SE students at IIT, University of Dhaka (IIT-DU), my undergraduate alma mater, one of the top three universities in Bangladesh. I had to rely on reading research papers and seeking advice from international scholars via email, as faculty members did not have relevant research experience. After coming abroad for PhD, I noticed that students from IIT-DU were still experiencing similar difficulties. Despite being ahead of other universities in Bangladesh for SE research, the progress was slow. Collaborations with scholars abroad could accelerate progress, but IIT-DU was barely known to international, top-tier researchers.

To ensure equity and empower the IIT-DU students to gain competitive, world-class research experience, I devised an outreach program that would address the lack of SE research internships through a research-track capstone project. The program enabled students to collaborate with world-class researchers, earning co-authorship in research papers and strong recommendations for higher studies. My advisors, Dr. Nadkarni and Dr. Poshyvanyk, kindly agreed to pilot this mentorship program. The proposal was integrated into the undergrad curriculum of IIT-DU and has been in effect for the last three years. Through this program, undergraduate students in and outside my direct mentorship have published papers in the ESEC/FSE, a top-tier SE venue, and have been accepted to prestigious CS Ph.D. programs, such as Purdue University, University of Virginia, and William & Mary (WM).

Moreover, I have taken several workshops at different universities in Bangladesh on Higher Studies to reduce the barrier to entry for CS/SE students at W&M on Security, and have mentored over 20 undergraduate students from WM on research projects. Furthermore, I have written an online book on Higher Studies in the Bangla language for Bangladeshi students. Thousands of Bangladeshis have appreciated this book, and some materials have been highly praised by the current Vice Chancellor, Dr. Niaz Ahmed Khan (equivalent to the President of the University) of DU. Based on these experiences, I learned that once students are given proper guidelines and actionable items with a reduced barrier to entry, learning about and achieving success becomes straightforward for them through their efforts.

Aside from these activities, I lead the Secure Platforms Lab (SPL) at William & Mary, and personally mentor junior students by giving them concrete feedback on their presentations, research manuscripts, and paper reviews so that they can learn to express their ideas both coherently and consistently, with clarity. Based on feedback from the Research Lab Director, Dr. Adwait Nadkarni, and students, I learned that such discussions helped students improve tremendously fast while also helping them express differing opinions respectfully.

As I transition to the next step of my career, I have learned that effective mentoring and teaching is one of the most important, critical factors for ensuring that under-represented students can fully take advantage of the opportunities they come across. By ensuring so, science benefits as it is shaped and realized by the different views, opinions, and experiences of people around the world.