The lottery of birth and circumstance holds back many of us from achieving our full potential. I have seen my mother, a highly educated anesthetist by profession, face familial pressures to work fewer hours that limited her career advancement. I have witnessed multiple women Ph.D. student friends of mine, not initially having a voice and requiring to significantly outperform other male students to gain equal recognition. This not only unfairly blocks individual progress, but also sets back society as a whole, as innumerable potential futures are lost to a spectrum of biases and systemic failures. In our own discipline of computing, many groups have been alarmingly underrepresented: women make up only 20% of the Ph.D. students in North America, and only 3% of Ph.D. students are from BIPOC groups, as highlighted in CRA's Taulbee Survey from 2012-18.

As a straight male student, and having grown up with access to some of the best education in India, I acknowledge the layers of social privilege which allowed me the chance to pursue a Ph.D. at a top university in the USA. At the same time, being a person of color and an immigrant in this country during my PhD, I also experience some of the biases and concerns that others from underrepresented groups face on a daily basis. Experiencing even this minor loss of privilege makes me realize its unmistakable presence before this phase of my life. Reflecting on this has hardened my resolve to be an ally, and utilize my social capital in equitably supporting those without privilege to begin with.

I have come to appreciate and celebrate the benefits of diverse representation: daily, I observe peers in my research lab from different genders, races, ethnicities, and cultures, providing different research perspectives based on their differing life experiences. Thus, I believe equitable representation is important not just from the standpoint of social justice for the underrepresented groups, but also for more significant societal benefits. In this statement, I outline my plans for advancing diversity as a future faculty and my efforts in past roles to that end.

Past Efforts in Promoting Diversity, Equity, Inclusion

Mentorship plays a critical role in ensuring the retention of diverse talent in computing and promoting diversity. Studies have shown that academic mentorship can boost academic success and improve program completion rates among students. I recognize the role played by my academic mentors in my successes and believe that if we provide equitable mentorship opportunities to students from underrepresented groups without the networks to find mentors, we can retain them better. Hence, I worked to create mentorship opportunities for students, particularly from underrepresented and marginalized groups. I initiated these through my role on the steering committee of Computer Architecture Students Association (CASA), whose mission is to make the computer architecture community more inclusive.

Mentoring in Computer-Architecture Conferences: During the COVID-era, as conferences became virtual and in-person interactions became limited, I organized virtual mentorship programs for students at multiple computer-architecture conferences. The goal of these programs was to make the community inclusive to new members (undergraduates and new graduate students) and eventually help retain diverse talent at this stage of the academic pipeline. I co-initiated the *Meet-a-Senior-Student (MaSS)* program at MICRO'20 and ASPLOS'21 conferences for junior students to be mentored by senior graduate students. I also helped scale-up and co-organize the *Meet-a-Senior-Architect (MaSA)* program at ASPLOS'21 and ISCA'21 in collaboration with Prof. Joel Emer for students to be mentored by senior researchers from academia and industry. **MaSA and MaSS enabled more than 500 virtual mentoring sessions during the pandemic in 2020-21**, ensuring new students had continued access to guidance on mental health, career growth and research, and found the community to be inclusive. Students found these programs to be very beneficial: for example, at ASPLOS'21, 90% of students found MaSS very useful (rating it 4+ out of 5), and 100% indicated they would participate again. My roles in MaSS and MaSA spanned outreach, eliciting sign-ups, matching mentors and mentees, and collecting feedback. I also mentored two junior students as a part of MaSS.

Long-Term Mentorship in Computer-Architecture: Building deep mentoring relationships requires sustained interactions over an extended period. As the next step towards creating an effective support-system for students from marginalized groups, I (and peers at CASA) shared a vision for long-term mentorship in computer-architecture in a paper (WCAE'21) at the Workshop on Computer Architecture Education 2021, which received the highest reviewer scores. This helped us initiate the Computer-Architecture Long-term Mentoring (CALM) program, which aims to provide immersive mentorship for students most in need of guidance by pairing them with an academic or industry researcher for a year. CALM is presently in pilot phase after its kick-off at MICRO'21.

Undergraduate Mentoring: During my undergraduate study at IIT-Bombay (India), I co-led a peer mentorship program for 1000+ undergraduate freshmen that helped them cope with academic stressors and identify and seek help for mental health issues. This program was particularly beneficial for students from marginalized backgrounds (from low-income households and with limited English education), as it provided them a robust support system in an alienating environment. I also mentored more than 20 freshmen over three years in this program and was also volunteered as a tutor for a high-school student from a low-income household in Mumbai in this period.

Future Plans for Diversity, Equity and Inclusion in Research and Teaching

I look forward to playing a vital role as a faculty member in encouraging and mentoring students from diverse and underrepresented communities. As an ally, I feel this would be the best opportunity for me to extend academic support

and provide equitable access to opportunities for people from underrepresented and marginalized groups. As a future faculty member, I plan to support DEI initiatives in the following ways:

In the Research Group: I will try to ensure my research group has a balanced representation across different genders, races, and ethnicities: a diverse lab is often more inclusive, based on my Ph.D. experience. I will also encourage the recruitment of students from BIPOC groups and women in my research group to not just increase their representation in computing, but also enrich the discipline. At the same time, I will also bring awareness within my research group on the diversity and equity problems in computing (*e.g.*, through suggested readings) to actively build an inclusive research group. But addressing diversity at the Ph.D. level addresses only one part of the problem of under-representation.

In Early Stages of the Academic Pipeline: Having mentored students across high-school, undergraduate, and graduate levels from different genders, ethnicities, and socio-economic backgrounds, I realize that attrition of students from disadvantaged groups occurs at each level of the academic pipeline. I will try to address this pipeline problem by mentoring undergraduate students, particularly from underrepresented groups, and offering them research internships. I will also volunteer in STEM outreach programs for K-12 students from such backgrounds to motivate them to pursue STEM careers. With these efforts, I hope to encourage more students from underrepresented and disadvantaged groups to pursue higher education in computing and research opportunities in my research group.

In Teaching: To encourage diversity and inclusion in the classes I teach, I will firstly ensure my language, content, and presentation style is truly inclusive. I will also try to recruit a diverse set of Teaching Assistants to boost enrollment and retention of a diverse group of students in the class. As a course instructor, I have noticed that some students are less likely to speak up. So, I will watch out for such students falling behind and be proactive in ensuring they have the assistance they need.

In the Academic Community: Lastly, at the community level, I plan to continue my involvement in scaling up CASA's mentoring activities and continue mentoring students from under-represented groups in computer architecture through programs like CWIDCA. I also hope to identify or initiate such mentoring opportunities in other academic fields I become a part of in the future.