

Diversity Statement

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As leaders in computer science, we are failing to attract and retain people from diverse backgrounds especially students in undergraduate and graduate computer science programs. Students from underrepresented minorities (URMs) like women, people of color, LGBTQ+, and students from low income families, are implicitly or explicitly discriminated in computer science programs. We need to attract these students and help them thrive, so that, they can bring their unique perspective in solving the challenges faced by computer science. I have been part of initiatives that help computer science education reach students from diverse backgrounds and help students apply to graduate schools. In the future, I will continue these efforts by taking part in groups that promote diversity in undergraduate and graduate programs.

Outreach Like other institutions, my undergraduate institution had a “hidden curriculum” of concepts that students needed to know to succeed in introductory computer science courses. The students who did not have this background were frequently from underrepresented groups. I started a “programming club” that aimed to bridge this gap. The goal of the programming club is to organize free workshops to teach programming and organize mentoring programs that assign senior students as mentors to junior students. I took part in these events as a teacher and a mentor. We organized about 10 events each year and all of our events were attended by over 100 students from all backgrounds. The programming club is still active after more than eight years and it hosts large number of events with more mentors.

In the future I will take part in events, such as K-12 Outreach programs, where I could teach and mentor diverse students from high school to graduate programs and especially students of URMs in their pursuit of computer science.

Mentoring For Future Studies Beyond the typical course advising, students also need guidance when applying for graduate studies. For example, an international student applying for graduate studies in the United States needs advice related to the letters of recommendation, statement of purpose, and living in a foreign city. As an international student and a first generation PhD student in my family, I faced similar situation when applying for PhD programs in the United States. This is why, after starting my PhD, I have been sharing my experience of PhD program applications and have been guiding students in preparing their application materials. Additionally, I am a member of SIGPLAN-M mentoring program where I meet with the graduate studies applicant every two weeks and help the applicant in their application.

In future, I will support groups, like Women in Computer Science, in anyway I can to help provide guidance to undergraduate and graduate students from URMs. I will also encourage my research students to contribute to the success of these groups. I will encourage undergraduate students of all backgrounds especially from URMs in my class to get involved in my research projects to obtain research experience.

Funding Opportunities In my undergraduate, I did research internships in the United States and UK universities to obtain research experience because there were no professors working in my field of interests in my undergraduate institution in India. Unfortunately, I could not find any funding to fund my stay in the US and UK. Being from a low-income country made it challenging to manage expenses and also focus on the internship projects. This experience made me aware of some of the difficulties students from low income families face in their education. I strongly believe that we cannot improve diversity in computer science without providing enough funding opportunities to students from low-income background and under-represented minorities.

However, the current number of fellowships available from government and industry sources are limited. So, I will work on creating new fellowship opportunities for students from low income families and URMs by reaching out to the alumni of the university. I will advertise these fellowships to department’s graduate and undergraduate students and encourage students from URMs to apply for these fellowships. I will offer my help to shape applicants’ fellowship applications, which includes how to obtain good recommendation letters and writing personal statements. Funding from these fellowships will help decrease the stress of students, so that, they can completely focus on learning and research.

Conclusion I believe that a key responsibility of educators in computer science is promoting diversity in computer science. I plan to promote more URM students in computer science by providing research exposure, more funding opportunities, and mentoring for graduate studies to these students. I aim to create a diverse environment in my classrooms by addressing the challenges faced by diverse student audiences, like non-native speakers and students with different backgrounds in computer science. I will build a research group consisting of students from different backgrounds because I believe that diverse backgrounds can bring new perspectives and spark great ideas.