

The most important goal of education is to empower students. To do so, I believe it is critical to have students represent a diverse spectrum of backgrounds. The mixture of viewpoints helps us achieve a productive and innovative educational environment.

Unfortunately, in computer science, we fall short on this goal. Taking gender as an example, the large majority of students in computer science are men. Making things worse, this trend begins long before students enter college. In high school, the number of male students taking the advancement placement (AP) test in computer science is three times more than that of female students.

To achieve a diverse student body, I believe we need to focus on three areas: empowering existing minority and female students in computer science, attracting the best students from diverse backgrounds into computer science, and creating an inclusive culture that prevents discrimination.

To empower existing minority and female students, we should help them build strong connections with each other and with other students. I plan to create a set of programs to promote minority and women students, such as networking dinners, women's research workshop, and other cultural events. These events foster communication and understanding. I also encourage students from different backgrounds to collaborate. I have collaborated with and mentored several women students. My personal experience shows that a balanced set of diverse perspectives triggers innovation. I have benefited tremendously from their insights and thus led to research papers both published and in press, with female co-authors.

I want to attract the best talent into computer science. I understand that students from low-income families are less likely to have access to good computer science education in high schools. For these students, it is important for us to reach out to them proactively. I plan to participate in outreach programs to inspire high school students' interest in computer science, especially for students from low-income families. I am interested in taking several of these students as interns in my research group, preparing the best students for future success in computer science.

Building an inclusive culture is important but requires persistent effort. It is challenging because discrimination can happen unintentionally against appearance, skin color, and gender. I believe the right approach is to raise awareness and provide people with tools to adjust their patterns of thinking. I am interested in organizing workshops that increase awareness around the issues of diversity and help students understand how biases are generated at the first place.

The problem of discrimination will not disappear overnight. But I hope with our effort, we make universities a more inclusive, and more welcoming environment for everyone no matter race, gender, culture, religion, socioeconomic background, and sexual orientation.