

As someone who grew up and went to college in post-Soviet Russia, I don't take the pursuit of diversity and inclusive environment on a university campus for granted. Being one of only two women in my undergraduate class of fifty, I was often told that I haven't earned my grades fairly or that I was only admitted so that the male students wouldn't get bored. Moving from Russia to Europe, and later to the US, felt like stepping into a time machine, fast-forwarding through several decades of civil rights movements, and suddenly finding myself in a very different world.

This first-hand experience of what difference an inclusive, bias-free environment can make, gives me a powerful incentive to promote diversity and equity. As an academic, I plan to advance this agenda through three main types of efforts. Firstly, I am committed to continually educating myself and my students on diversity-related issues. An example of such an issue is *implicit bias*: unconscious stereotypes about various social groups, which can affect our perceptions and behaviors without us even realizing. When I first took an Implicit Association Test (IAT) [2] for measuring gender bias, it showed that I associated science and career with men more closely than with women—an unexpected and disturbing result. The good news, however, is that recognizing your biases is the most important step towards overcoming them [3]; therefore I believe it's important to talk about implicit bias in class and encourage students to take IATs.

Secondly, I will put emphasis on fostering inclusive and fair collaboration, both in my class and my research group. Several recent articles [5, 6] have drawn attention to the collaboration problem in STEM: while team projects are a core component of STEM education, for many people from underrepresented groups (in particular, women) their first encounter with collaboration is to be treated in stereotypical ways by their peers. A recent study [5] identifies this as one of the main reasons why women leave engineering. To address the collaboration problem, I plan to raise awareness of the issue among students, and give them guidance regarding team formation and work distribution in collaborative projects. More concretely, some effective strategies [4] that I plan to adopt include assigning teams pseudo-randomly and instructing students to have specific rotating roles and to document assignment of responsibilities. In addition, I believe that it's useful for students to learn about gender differences in problem-solving strategies [1], which would help them better understand their team members.

Finally, I plan to continue participating in mentoring and outreach programs for underrepresented social groups. In the past, I took part in a *Seminar on Women in Computer Science* at Ochanomizu University in Tokyo, where I and several other female computer scientists gave presentations for Japanese undergraduate women. In my presentation, I tried to debunk various stereotypes about female scientists and engineers, which could hold these women back from pursuing a career in STEM: for example, that scientists are not feminine, that they are locked in their labs, and are unlikely to have fulfilling relationships and families. I also participated as a guest speaker in the MIT's *Women in Technology* program, which gathers talented female high-school students from across the country and provides them with the opportunity to study programming and electrical engineering at MIT over the summer. Both of these experiences were extremely rewarding and I look forward to participating in a more diverse set of outreach activities as an educator.

I wish I could just step into a time machine again and end up in a future where every computer science classroom and research lab is filled proportionally with people of different genders, races, ethnicities, sexual orientations, and socioeconomic statuses, where everyone feels that they belong and that nothing hinders them from achieving their full potential. Unfortunately, there's no such time machine. It is our responsibility to create this future through commitment and hard work, and I consider it a privilege to do my part.

References

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