

Diversity Statement

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Anticipating Individual Needs. I believe that it is critical when teaching and mentoring to anticipate the needs of students, especially of those from diverse backgrounds that are not well represented in computer science. As a teaching assistant for Graduate Algorithms at CMU, I realized shortly into the semester that a particular student from an underrepresented group often seemed to have follow-up questions at my office hours, but did not seem comfortable asking these questions in front of his peers. I emailed him after office hours were over, providing an opportunity for him to ask me questions or schedule a time we could meet to go over questions that he had about the material. In the following weeks, we would discuss both technical questions and chat more informally about his progress and feelings about the course after my office hours. As the semester progressed, he grew in his confidence, and ultimately was able to participate fully during my office hours, and became comfortable asking questions and interacting with the professor in class. *In my teaching and mentorship now, I always try to understand and anticipate the needs of individual students to make sure that they have every opportunity possible to succeed in their coursework or research.*

Building Confidence. When working one-on-one with some students, I have observed that they can display a lack of confidence in problem solving that belies their abilities, and prevents them from fully engaging with the material. I have sought to improve the confidence of my students and advisees by showing them that they have it within themselves to generate the right ideas and solve problems on their own. As an example, if the student becomes stuck at a particular point in the problem, instead of either giving away the answer, or letting the student silently struggle, *I talk with them about what they are thinking to try and understand their approach.* Often, students intuitively grasp the core idea of the solution, but become overwhelmed by details, and simply letting them know that they are on the right track and providing encouragement can give them the confidence needed to solve the problem on their own. In other cases, discussing the high-level ideas together with them can help lead them towards the right idea while enabling the student to feel like they “got it” themselves, and making them more confident to try out ideas and trust their intuition in the future.

Promoting Diversity and Inclusion. During the course of my undergraduate and graduate careers, I have had many opportunities to chat with undergraduate students from diverse backgrounds about their experiences in computer science. *I have noticed that students from underrepresented groups often suffer from imposter syndrome.* These students perceive that they are somehow unqualified to be a computer scientist, and especially to pursue research, feeling that “they were not smart enough to do research”. In my interactions with students I try to understand if they harbor such notions, and to help them understand that they belong in computer science, and that the field will be better for having them. In the context of promoting research, one of the primary ways that I have done this is *by simply suggesting to students that they can do research—that research is an option for them!* Having a teacher or mentor suggest that a previously unconsidered career path is an option can be sufficient to give students enough confidence to give it serious consideration when planning for the future.

In graduate school, I made a significant effort to improve the diversity and inclusion within my research group. I helped mentor several students, including two undergraduate students who wrote their honors theses with me, and I am proud to have gender parity among the students I worked with. *I am also very proud that more than half of the current students I currently work with and help advise are female.* At CMU and MIT, I have organized reading groups on parallel algorithms, which emphasize an inclusive environment that gives everyone a chance to speak and contribute their opinion, without fear of having their voice be ignored.

Goals. As a faculty member, I will continue to be deeply committed to promoting an inclusive culture, and supporting a diverse group of students in my teaching and research. *I understand that I will be a representative for computer science to many students who are getting their first experience of our field, and will do all I can to promote the wellbeing, education, and intellectual development of these future members of our field.*