Diversity Statement

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My first real exposure to diversity was when I moved 300 miles away from my hometown to my undergraduate college. I met fellow students from diverse socioeconomic, religion, language and geographic backgrounds and witnessed that students from different groups faced unique sets of challenges. I met a much older student in the same class as me whose education got delayed because he was a rickshaw puller and one of the primary sources of income for his family. A friend from my hometown had to fight her parents to allow her to travel and live so far from them for getting her engineering education and then had to face hurtful comments such as “you just got that award because you’re a girl” and many instances of micro-inequities from fellow students studying in a highly skewed environment of 10:1 boy to girl ratio. Another friend went to a Hindi medium school during his entire lifetime and faced significant hurdles while attending all classes taught in English which negatively affected his grades.

I learned a lot from the journeys of these strong-willed friends and became especially aware of my privilege in obtaining technical education. My privilege was increasingly apparent when I came to the US. I’m an Asian male who got various forms of scholarships to pursue my career goals in technology and never had to face stereotype threats and inequities.

Moreover, while supporting the careers of these friends and others, I understood the crucial role played by the equity efforts by various parties in an ecosystem. Our undergraduate college provided *merit-cums-means* scholarship [1] to waive large portions of fees for students from underserved families. Book publishers provided “*Low Price Edition*” textbooks printed on low-quality paper. Special classes for learning English and for filling other knowledge gaps were organized to bring students up to speed with the course lectures.

During my undergraduate, I organized Basic of Programming, BoP courses, attended by over 150 freshmen students geared towards helping students who had not seen or interacted with a computer before starting the engineering program to get early hands-on-experience with computers outside of the formal class curriculum. During my graduate school, I was a member of IGraSP [2], a non-profit organization, to guide and assist Indian Graduate students in getting started with their life at Purdue University. Incoming international students often arrive late at night without cellular connectivity and do not have a place to stay. I helped dozens of such students over the years and provided them temporary stays until they had a place of their own. As part of Alpha Phi Omega [3], a national service fraternity, I participated in several initiatives in providing social opportunities for college students such as helping a group of Korean exchange students to get conversational English speaking and listening experience.

I plan to continue participating in such initiatives but I understand that as a faculty member I’ll have a greater influence on students which gives me a much greater responsibility to create an equitable and inclusive learning environment. I believe the first step to do that is to face all forms of biases in myself which is known to help in overcoming them. When I first took the Implicit

Association Test (IAT) [4], it was a shocking revelation for me that I associated careers more strongly with men compared to with women. I've since then adopted a mindfulness practice which is shown to help in overcome biases [5]. I believe it's important to raise awareness about implicit biases among students encouraging them to take IATs and further mandate IATs for course TAs to educate them about their biases.

Secondly, several studies have shown that role models are instrumental in reducing stereotype threat [11] and in increasing retention and recruitment of women in STEM [6, 7]. I personally had several role models during different stages of my career who continue to inspire me in a myriad of ways. I like to inspire students by sharing inventors' and changemakers' human struggles and how they overcame them (see my teaching statement). When preparing a course story, I plan to highlight the achievements of inventors from diverse backgrounds with their unique struggles when I weave their stories into the course material.

Thirdly, perhaps most importantly, I will emphasize creating an inclusive collaboration among students. Studies have shown that students from underrepresented groups, especially women, change their minds about STEM education due to biased interactions with their peers [8,9] and then carry more weight of the collaborative projects [10] without getting any extra credit for it. I will encourage a culture of mutual accountability [10] among students to submit a document on their collaboration plan on equal distribution of project with rotating role assignments.

Finally, I focus on creating friendly spaces for open, non-judgemental communication. I like to keep myself available and maintain an "open door policy" where students can come in and discuss topics beyond just the coursework. I strive to remain a good listener which I've found to be incredibly powerful in my mentoring and managing engineers. In my classroom, I am mindful to never call out individuals maintaining everyone's freedom to not speak when they don't want to and keep open avenues for anonymous participation for gathering feedback and answering course related queries using online systems like SurveyMonkey and Piazza.

To summarize, I've lived in 3 different countries and have had countless fruitful collaborations with people from diverse backgrounds and have observed unique challenges faced by people from different groups. I'm acutely aware of my responsibility for shaping future generations and for creating an equitable and inclusive learning environment for them where they can thrive and do not feel afraid to bring in their whole selves.

References

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