

I am a male from the Indian subcontinent. I work in computer science and engineering. I am quite privileged based on my gender and ethnicity. However, this is only a part of my identity. I also come from a family where no one in our history attended college; a handful attended high school. I am also from a rural area with a population of half a million people. When I joined college, I knew of only two people with professional degrees: one became a doctor, and the other became an engineer. I am also an orphan whose mother had to sell dried-out cow dung as fuel to make ends meet. I saw my elder sister not being allowed to pursue education beyond 10th grade. I was also ridiculed for my darker skin color than my peers. By the end of my undergraduate studies, I did not know that the US Ph.D. programs required things called GRE and TOEFL.

I do not mention all of these aspects of my past only to demonstrate my resilience, which they do, but to acknowledge the countless mentors, advisors, and benefactors who helped me reach a point in my life that I am applying to join the faculty of one of the top schools in the world. I have learned a lot of lessons on how to enable people to reach their full potential, how to make people feel part of the group, how to have an impact beyond just your technical field, how things beyond one's control may be used to discriminate against them, and how to acknowledge that a seemingly privileged person can also be marginalized. I have put my lessons into practice in my academic journey thus far. Below, I describe concrete examples of my efforts toward diversity, equity, and inclusion. I also outline my plans for continuing my efforts as a faculty member.

My Service and Teaching Efforts Informed by my life experiences, I have made a conscious effort to make people I engage with feel included, appreciate how the diversity of thoughts enriches personal and professional lives, and how to have a societal impact through my research beyond environmental impact mitigation.

1 – As a Postdoc Mentor. My priority as a mentor has been to ensure that the students had strong ownership of their work and that they viewed me as a guide that could help them achieve the goals they had set for themselves. However, it was easier said than done. My students brought a rich diversity of thoughts, approaches to problem-solving, and work ethics. Some were independent, while others were understandably anxious and needed support initially. Learning by experience, I have adopted an approach that combines a few non-negotiable rules, such as periodic communication, with individual management matching their work approach. I have been very successful in my efforts, as evidenced by students from diverse backgrounds (e.g., 13 Asians, 5 North Americans, 5 Africans), gender identities (e.g., 12 males and 12 females), and educational levels (first-year undergraduate students to final-year Ph.D. students) have consistently sought my mentorship.

2 – As a Program Chair. I have made concrete efforts to enhance diversity and broaden participation in various organizational roles [1–3]. As a chair for the ACM SIGEnergy workshop on Societal Decarbonization in 2022, I ensured that more than 42% of the talks were delivered by female-identifying researchers, a ratio more than double that of the female reviewers at the main conference. Maintaining the same ratio for subsequent in-person conferences has been challenging, but I strive for it every year with a renewed conviction. To enable broader participation, I have sought to organize the events in hybrid mode so that people from countries that cannot attend due to financial constraints or visa issues can participate in the program.

3 – As a Researcher. As the use of algorithms and other computational methods for decision-making in various societal domains increases, we must ensure that our technical solutions do not propagate the existing inequities in society or introduce new ones. Therefore, the topics of fairness, equity, and inclusion have been central to my research work, which has tackled the problems of equity-aware energy transition in buildings [4–6], enabling low-cost electrification in sub-Saharan Africa [7, 8], equity-aware ride assignments in ride-sharing platforms [9, 10], fairness in solar power curtailments [11, 12], equitable incentive allocations [13], and tackled the problem of disproportionate load-shedding in developing countries [14]. In an ongoing collaborative effort with social scientists and policymaking scientists, I am investigating the impact of the hyperscale datacenters on nearby communities and how their voices can be included in the datacenter siting, design, and operation. I plan to continue and expand on these topics when exploring my future research work on computing-energy-society nexus.

My Future Plans As a faculty member, the impact of my actions will be much more significant than at any other point in my life. I will also encounter situations where my past experiences will not apply. This realization scares me at times. However, I think it also shows that I care. I cannot possibly understand every point of view, but I will listen. I cannot use my experience at all times, but I will learn. I cannot solve all the issues presented to me, but I will ask for help. With nervous excitement, I am ready for this next chapter in my life and describe my current philosophy on how I will approach various roles I assume.

1 – As an Advisor. As a tenure-track faculty member, my main responsibility is to produce high-quality and impactful work, which I will never achieve without my future students. More importantly, my students cannot help me accomplish my task if they do not have an environment where they feel safe, valued, and comfortable. Beyond sharing my vision of how to identify the problems worth exploring, how to conduct research, and how to disseminate the findings, my job will be to create an environment where people's passion for the work or ability to do it is not hampered by anyone based on how they look, what they wear, their political identity, their gender or sexual orientation, and their socioeconomic background. However, differences,

misunderstandings, and conflicts are inevitable as people from diverse backgrounds come together. From day one, I will ensure that my students know they have multiple outlets to express their concerns, including me, at least one other faculty member, and multiple departmental or university-level channels if needed.

2 – As a Teacher. Most of the courses I can teach are highly interdisciplinary, and they have been shown to attract students from groups traditionally underrepresented in STEM [15]. This represents an exciting opportunity to develop a workforce ready to solve broader societal problems beyond the equally important task of building computer systems at technology companies. However, this will also require me to be a good course administrator who considers their obligations as members of diverse social, religious, and ethnic groups. I must also understand the personal and often unexpected constraints we face as humans; sometimes, life just happens. Being flexible as a teacher without compromising the quality of education will no doubt be a big challenge, but the potential positive impact on students is worth all the effort.

3 – As a Collaborator. For effective interdisciplinary collaboration, it is essential to acknowledge that you are only an expert in your field, and the learning will never stop. Furthermore, to have a real-world impact, you would interact with non-academic stakeholders who have a unique perspective on the problem. Finally, and most importantly, despite good intentions, male colleagues can inadvertently discredit or ignore the ideas of their non-male colleagues. It can be tough to admit having blindspots, especially when you are trying your best. The only way forward is to be open to feedback, which will not always reach you how you want it. However, the key would be to focus on the message and respectfully engage in the dialogue. I will prioritize trust, mutual respect, and good communication, which are the key ingredients for successful collaborations.

4 – As a Department or University Community Member. I want to be part of a community that makes a conscious effort to broaden participation, develop sub-communities for students from various backgrounds, and provide safe, accessible avenues for students to voice their issues. I will work with the existing efforts at the department, school, and university levels to help them achieve their stated goals and amplify their impact within my capacity.

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