Rajiv A. Khanna

Diversity Statement

My commitment to inclusion and diversity in academics stems from my own personal experiences and family history. I grew up in a middle class family in a small conservative town in northern India. While I have had my own struggles to the path to my PhD, I recognize that I had a lot more options available to me simply because I am a male. Unlike my wife when she was pursuing higher education, I did not ever have to think about societal pressures or established gender roles hindering my ambitions.

My parents were both firsts in their respective families to get college degrees. They both had to struggle because of their backgrounds. My dad had to fight poverty and worked two jobs to put himself through law school and went on to become a District Attorney. On the other hand, my mother was not even allowed to attend school after the 10th grade. She home-schooled herself, and studied by borrowing books and notes from her college-going friends in the neighborhood, and went on earn a Masters degree after passing the exams without attending college for a single day. She went on to become a teacher, mostly because that was the only job for a woman accepted by the society at that time. My parents' struggles have made me more sensitive to how societal inequities affect opportunities. It was also my mother's grit and encouraging words to me and my wife to continue her education after we got married that pushed my wife to get her MBA. It is still extremely rare for a married Indian woman to go back to school full-time. This has further inspired other women in our extended families to seek higher education. It is amazing to see how much of a ripple effect across generations one person's grit can have in breaking stereotypes and fighting institutionalized inequities.

During my time as a graduate student and as a postdoc, I have had the pleasure of working with people from many different backgrounds. I have witnessed first hand and understand how diversity encourages innovation. I have also taken the opportunity to encourage diversity where I could. As part of an initiative of the Berkeley Artificial Intelligence Research (BAIR) Lab, I volunteered as a mentor to two bright undergraduate female students interested in exploring research as a career path. We met once a month, and I would familiarize them with ongoing research at UC Berkeley and answer any questions they had. I also suggested possible paths for them to get involved in research. Both of them are now part of research labs here at Berkeley as undergraduate researchers. It is encouraging to see other such programs being also undertaken in many universities across the United States.

However, we still have a long way to go. There is a recent study [1] about diversity in scientific research that concludes underrepresented groups innovate at a higher rate but their innovations are often discounted. As such, (verbatim quote) "there may be unwarranted reproduction of stratification in academic careers that discounts diversity's role in innovation and partly explains the underrepresentation of some groups in academia.". This means even in the research community, we are riddled with underlying biases that will require our active participation to be dealt with.

Such biases likely exist in other fields as well, and are known to be exacerbated by automation. A significant thread of my research is based on interpreting model predictions (more details in my research statement). Interpretability is important not just for scientific studies but also for driving responsible AI by gauging societal impacts and unearthing biases in increasingly complicated machine learning models. I plan to continue working on this thread by developing more sophisticated, faster and theoretically grounded tools to make interpretability more mainstream and accessible.

I commit to working towards enhancing diversity and equity in my research group, department and institute. I will make conscious efforts to better understand pervasive biases in our society and contribute in any way I can to effectively combat them for a more equitable tomorrow.

References

 Bas Hofstra, Vivek V. Kulkarni, Sebastian Munoz-Najar Galvez, Bryan He, Dan Jurafsky, and Daniel A. Mc-Farland. The diversity-innovation paradox in science. *Proceedings of the National Academy of Sciences*, 117(17):9284–9291, 2020.