

Rohan Padhye - Broader Impact Statement

Diversity, Equity, and Inclusion

Academia is scarred with a plethora of disparities in one's opportunity to succeed on the basis of facets not related to one's skills or abilities such as gender, age, race, ethnicity, national origin, sexual orientation, and marital status. I am familiar with these issues from both sides, having faced ample discrimination in some situations as well as benefiting from unearned privilege in others. In order to address these challenges, I am committed to promoting diversity, equity, and inclusion through my role as a researcher, educator, and a member of the global academic community.

I recently published a [blog post](#) [1] on visa issues affecting equitable participation of researchers in international conferences. In the article, I summarize several inclusive policies that conference organizers can consider to mitigate the systemic biases against national origin and citizenship that many researchers have to deal with. The post received considerable circulation and discussion [on social media](#). Concretely, my effort prompted the chairs of ICSE 2020, PLDI 2020, and ICFP 2020 to update their websites and/or call-for-papers adding explicit support for authors who may be denied a visa to attend the conference and present their work.

I am also mindful of the challenges faced by those I work with and I try my best to make a positive impact where possible. For example, I once noticed a fellow student at Berkeley making self-deprecating comments on social media in response to discussions about her research. I privately pointed this out to her and encouraged her to be more forthright about her achievements. Over the next few months, I was glad to observe a shift in her writing style towards increased self-confidence. Recently, she sent me a note that said: *"for some reason, you pointing out an actual, resolvable, instance of me shooting myself in the foot, while also saying that you did appreciate my technical contributions, reduced my imposter syndrome"*. (quoted with permission)

As a teacher, I try to create an inclusive classroom using well-studied methodologies. For example, I make it a point to learn students' names, address them individually during discussions, and thank them for their participation. I also make sure to accommodate the diverse set of engagement styles that some students might prefer based on cultural or personal differences.

Further, I am heedful of institutional policies and their impact on diversity and inclusion. Where necessary, I actively endeavor to effect change. For example, I have been championing the reconsideration of the GRE requirement for applicants to the PhD program at Berkeley EECS. Studies have shown a disparity in GRE scores: women and minorities in STEM tend to have lower scores on the quantitative section [2]. Studies have also shown that the scores themselves are a poor predictor of success in graduate school [3, 4]. Moreover, GRE scores are rarely used in our department's PhD admission process in practice. The monetary costs and stress of taking the GRE is an unnecessary burden that disproportionately affects students from the developing world and from underrepresented groups. I campaigned for this cause on our department mailing list. With the overwhelming support of the student body, I was able to get a discussion table dedicated to this issue at the annual town hall. Although we could not affect the current admissions cycle, I am currently liaising with department staff to possibly introduce reforms next year.

Open Science and Reproducibility of Research

I strongly believe that for science to make rapid and sustained progress, published research must be made openly accessible, reproducible and, where artifacts exist, also directly reusable.

For example, I am a vocal proponent of the artifact evaluation (AE) process introduced by many ACM conferences. There is of course some debate in the community on the value of this process, especially due to the amount of manual effort required to submit, review, and maintain research artifacts. However, based on my experiences with five different AEs—three as author and two as an AE committee member—I believe that the research community has overall benefited from the incentives for making artifacts open and reusable. I intend to conduct a survey to validate this hypothesis in the future. A few months ago, I published a [blog post](#) [5] outlining my opinions on how authors can produce better research artifacts that can be formally evaluated. This post was endorsed by [the chairs of USENIX's first artifact evaluation](#).

Going forward, I am committed to ensuring the reproducibility of the research produced by my future research group, to the extent permitted by legal and funding agencies. I intend to publicly outline my commitments in this regard—inspired by previously published [manifestos](#) [6]—in order to encourage future students and collaborators to join in this endeavour.

References

- [1] Rohan Padhye. (2019). Equity and Inclusion in International Conference Attendance—What can conference organizers do? In *Primordial Loop (Blog)*.
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- [3] Robert J. Sternberg and Wendy M. Williams. (1997). Does the Graduate Record Examination predict meaningful success in the graduate training of psychology? A case study. *American Psychologist*, 52(6).
<https://psycnet.apa.org/record/1997-04591-002>
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- [5] Rohan Padhye. (2019). Artifact Evaluation: Tips for Authors. In *Primordial Loop (Blog)*.
<https://blog.padhye.org/Artifact-Evaluation-Tips-for-Authors>
- [6] Marcel Böhme. (2019) Software Engineering Reproducibility Manifesto.
<https://mboehme.github.io/manifesto.html>