Diversity Statement

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Diversity is crucial for fostering creativity. By bringing together individuals with varied backgrounds, identities, experiences, and insights, we expand the boundaries of research and ensure a more holistic approach to problem-solving.

I believe that fostering diversity requires sustained efforts in both **recruiting** and **retaining** students. This document highlights my contributions to these areas and outlines future initiatives. That said, I recognize that there is still significant progress to be made, and I am committed to promoting a diverse, equitable, and inclusive environment within my group, department, and the broader research community.

Recruiting students. My primary experience with recruiting students comes from the Summer@EPFL program [4], in which research labs at EPFL hire undergraduate students from around the world as summer interns. I recruited interns for my lab for five years and was fortunate to have an advisor who gave me full autonomy in selecting and mentoring them.

I quickly noticed that my most successful interns often came from non-traditional backgrounds and differed significantly from the majority of interns in terms of their undergraduate institutions, countries of origin, and prior research experience. For instance, Kartikeya and Musa, two of my standout interns, came from universities from which *EPFL had never previously hired interns*.

I found that such interns were not only highly motivated but also often brought unique experiences and skills that made challenging projects more tractable. For example, Kartikeya had taught himself to write code by studying and contributing to the Linux kernel. This led to him eventually being associated with the Linux Foundation and becoming an expert on the eBPF subsystem in Linux, which made the KFlex project [1] feasible. Similarly, Musa, through a specific partnership between his university and the Turkish Department of Defense, had gained expertise in hardware support for virtualization, which enabled him to make significant contributions to the Concord project [2].

During my time at EPFL, my lab recruited a diverse set of interns, including several women, students from countries such as Ethiopia (which EPFL had rarely hired from before), and students from universities EPFL had never hired from before. Although not all students were as successful as Kartikeya and Musa, the positive outcomes far outweighed the challenges, with many of these interns now pursuing PhDs at top universities such as UC Berkeley, Stanford, and EPFL.

In addition to directly recruiting interns, I also volunteered with EPFL's Review of Application Materials (RAMP) program [3]. The goal of this program was to have graduate students assist PhD applicants from non-traditional backgrounds by helping them improve their application materials, such as their resumes and statements of purpose.

Retaining students. I believe that access to mentors with whom one can discuss their professional and personal lives is critical to ensuring that students feel comfortable in a new environment.

To this end, I have served as a mentor to incoming students at both IIT Bombay and EPFL. At IIT Bombay, I mentored twelve students, including several from historically marginalized backgrounds, to help them acclimate and provide a sounding board for any challenges they faced during their first year. Similarly, at EPFL, I supported new PhD students through their first semester, offering guidance and helping them adapt. These experiences not only helped me better understand the challenges faced by underrepresented students but also fostered lasting friendships.

Future initiatives. I believe that diversity within a research group is often self-perpetuating. Representation is important, and in my experience, students are more inclined to join a research group where they see others like themselves thriving. With this in mind, I am committed to cultivating a diverse research group from the get-go.

I also plan to establish a program similar to Summer@EPFL within my department, as I view summer internships as an effective way to recruit diverse talent. Extending these opportunities to high school students, as some universities do, can further encourage early engagement in computer science. Internships, with their short duration, reduce the risks of the hiring process and can open the door to top-tier research experience for a wide range of students. Such programs often become reliable pipelines for future graduate student recruitment, which further fuels my enthusiasm to implement them.

In summary, while there is still significant progress to be made for the research community to reflect broader societal demographics, I am committed to advancing this mission throughout my academic career. By creating targeted initiatives and fostering mentorship networks, I aim to inspire a new generation of researchers who value diversity and contribute meaningfully to an inclusive and equitable academic culture.

References

- [1] Kumar Kartikeya Dwivedi, Rishabh R. Iyer, and Sanidhya Kashyap. Fast, Flexible, and Practical Kernel Extensions. In *ACM Symposium on Operating Systems Principles*, 2024.
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- [3] RAMP program in EPFL Computer Science. https://epic-guide.github.io/ramp. [Last accessed on 2024-10-23].
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