

Personal Statement

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My decision to pursue a Ph.D. is guided by my inclination towards a research career in academia. This desire is additionally influenced by my journey in research and academia. I feel that academia provides a unique blend of teaching and mentorship opportunities in conjunction with research. This statement will broadly describe my experiences along three main axes – teaching, outreach, and mental health, and how they have influenced my decision to pursue doctoral studies at Cornell.

Teaching. IIT Delhi provides teaching opportunities to its senior-year undergraduates. I availed this opportunity in the Monsoon (Fall) 2020 semester. I served as the sole Teaching Assistant for the **first offering** of [CSE559 Mining Large Networks](#). This was a graduate-level research-oriented course offered by [Prof. Tanmoy Chakraborty](#). The course covered content was based on my **thesis research** with Prof. Chakraborty, and it was an exciting experience for me to design materials to convey concepts that I had learned for my research (like PageRank, Graph Representation learning, and so on) from a classroom perspective. Additionally, the class consisted of students from **junior undergraduate to doctoral level**. Hence, it was a challenging and exciting experience to develop material that is accessible and valuable to all levels.

However, this experience also exposed me to the **inequity** in our classrooms. Midway through the semester, a **nationwide lockdown** was imposed in India on account of COVID-19. However, educational institutions across the country decided to continue with their academic activities. This presented a grave challenge as a few of the students in the class relied on lab machines to work since they **did not own laptops**. Conducting virtual lectures would altogether leave out such students. Additionally, many more students did not have access to a stable internet connection at their home locations (about **60%**), while some (about **25%**) could not afford to get a personal internet connection at all. Hence, ensuring access to content for students was a big challenge. With the support of Prof. Chakraborty, I worked to the best of my abilities to ensure this situation was as convenient for the students as possible. In addition to the lecture slides, I provided the students with additional typed notes related to the topics covered in the lectures. I **took the initiative** to personally reach out to students who were being irregular in class to check in with them about the challenges they were facing and ways to facilitate learning. In the end, we managed to finish the course on time (this was exceptional for this semester in my university) and received **positive feedback** from the students for the course as well as for [my role as the TA](#). The pandemic also highlighted the lack of an offline resource on the topics covered in the course. To mitigate this, Prof. Chakraborty started working on a textbook for the course. Having experienced the need for such a resource firsthand, I offered to help and contributed multiple chapters and exercises to the book. Recently the book was released and received positive testimonials from stalwarts in the area, such as [Prof. Jure Leskovec](#) (Stanford University), [Prof. Soumen Chakrabarti](#) (IIT Bombay), and [Prof. Manish Gupta](#) (Google Research India, and IIT Bangalore).

As a Ph.D. student at Cornell, I look forward to serving the wider student community as a Graduate Teaching Assistant and creating an inclusive environment for students in the course.

Outreach. I was fortunate enough to pursue my studies at an institution that encouraged and incentivized research at the undergraduate level. However, throughout my studies, I have come to realize that not many are as fortunate. Outreach about opportunities is still a dire need for greater inclusion and diversity in Computer Science research in general and Graphics research in particular. To fill this gap, I have been a member of the [SIGGRAPH Research Career Development Committee](#), led by [Prof. Justin Solomon](#) (MIT), as a part of the [Undergraduate Mentoring Subcommittee](#). The committee is focused on attracting and mentoring undergraduates and early-career researchers in Graphics research. One of the efforts that I am leading as a member is the curation of resources to help arm new students with the technical expertise needed for research in Computer Graphics. As a Ph.D. student at Cornell, I intend to continue in this role and participate in similar efforts for greater inclusion and diversity in academic research.

Mental Health. Mental Health is an essential aspect of a healthy life. With the onset of the pandemic, I have seen and experienced firsthand how mental well-being has gone for a toss for most working professionals, including researchers in academia. I have experienced firsthand how anxiety can cripple the creative spark and

motivation for research. But fortunately, I have been privileged to be associated with institutions, both at IIT Delhi and later at Microsoft Research India, where mental health issues are recognized and access to mental health experts is facilitated. With proper support, it has been easier for me to deal with these issues. Many, however, are not so lucky, and I want to make conscious efforts to help those in need of mental health resources. To this end, at IIT Delhi, I applied for and was selected as a mentor for the **Student Mentorship Program**. As a student mentor, I interacted with a group of first-year undergraduates, helping them navigate college life and dealing with issues such as homesickness, imposter syndrome, and anxiety management. I received training from the institute's well-being cell and the faculty panel of the program for this role.

I am also committed to encouraging a conversation around mental health issues and helping folks who are struggling come forward and seek help. I look forward to working with student groups at Cornell with similar goals, such as **Cornell Minds Matter**, **EARS**, and **Cornell Reflect**. The commitment of Cornell University to the mental well-being of its graduate student community has had a significant influence on my decision to pursue a Ph.D. here and I believe that I would fit right into the culture of "lift others while uplifting yourself" at Cornell!