

My personal and professional journey has prepared me to live out Virginia Tech's motto, *Ut Prosim* (That I May Serve), by meeting students and colleagues where they are and working to remove practical barriers to their success. Moving from a middle-class regional majority in West Bengal to a minority immigrant and international student in the United States has given me a grounded understanding of how life circumstances shape access to education, a perspective I now see as a responsibility to serve others: students, collaborators, and the broader community.

India is comprised of a diverse collection of ethnic regions, but my early social circles were relatively homogeneous in both background and opportunity. I had access to tutoring centers, supplementary books for competitive exams, and reliable public transportation. When my family immigrated to the United States in search of better opportunities, we transitioned from the Indian middle class to the American lower class due to the higher cost of living. Suddenly, books, test preparation, and even transportation were difficult to afford. Experiencing this shift firsthand taught me how quickly financial instability can block educational progress, and it sharpened my commitment to creating environments where students are supported not only intellectually but also practically.

In Indiana, I attended Benjamin Bosse High School, a historically Black institution with fewer resources than neighboring schools in wealthier districts. At first, I felt frustrated by the lack of facilities and academic support. Over time, my perspective changed as I got to know classmates whose challenges went far beyond mine. Many of them worked long hours after school, sometimes sacrificing homework time and exam preparation to support their families. One close friend, for example, could not attend after-school tutoring for pre-calculus because of his job at McDonald's. To help, I began taking detailed notes, preparing examples, and meeting him at the local library to review the material. His grades and confidence improved, and I learned an enduring lesson: meaningful service is often small, consistent, and tailored to an individual's constraints. At Virginia Tech, I hope to carry this spirit into my teaching by designing courses, office hours, and mentoring structures that recognize students' varied work, family, and financial responsibilities.

During my undergraduate studies at the University of Evansville, I served on my fraternity's disciplinary council, where we upheld our core values of virtue, diligence, and love. In this role, I worked to prevent hazing and exclusionary practices, including policies that limited building access for new members. I led a successful effort to retire outdated traditions that, in practice, encouraged bullying and sent harmful signals about who "belonged." This experience taught me that communities do not stay healthy by accident; they require intentional governance, difficult conversations, and a willingness to revise traditions in light of present-day values. At Virginia Tech, I intend to bring this same mindset to departmental service, whether on committees, in student organizations, or in lab leadership; by asking how our practices can better support learning, growth, and mutual respect.

As a Ph.D. student at the University of Texas at Dallas (UTD), I learned from and worked alongside students from a wide range of backgrounds, ages, and life circumstances. Within this environment, I met other Bengali students who felt compelled to set aside parts of their cultural identity in order to avoid negative attention. Recognizing their sense of isolation, I founded *Sommiloni of Bengali Students (SBS)*, a cultural organization that gives Bengali students a home away from home while helping them navigate the cultural friction of immigration. Organizing SBS events, whether small gatherings or larger celebrations, reinforced for me that a strong academic community rests on genuine human connection. At Virginia Tech, I hope to contribute similarly by supporting student groups, creating spaces where international and domestic students can connect, and collaborating with existing organizations to build a sense of belonging that sustains academic excellence.

Throughout my time at UTD, I served as a teaching assistant for four different courses across ten semesters and mentored both undergraduate and master's students on research projects and theses. I worked with

part-time students balancing full-time jobs, students with learning disabilities, and others navigating personal or family challenges. In response, I set alternative evening office hours for working students and developed hands-on visual demonstrations to better support those who learned by doing. These choices often came at a personal cost, preparing demos in advance or shifting my own study schedule, but they reflected my belief that teaching is a service role. At Virginia Tech, I will continue this approach by offering flexible and predictable office hours, providing multiple pathways to engage with course material (e.g., visual examples, coding walkthroughs, and written explanations), and proactively checking in with students who may be hesitant to ask for help.

In the classroom, I have also encountered more subtle barriers to participation. For example, several students who had immigrated from African countries hesitated to speak during in-class debates because they were self-conscious about their accents. By sharing my own immigration story and my early discomfort with speaking up, I encouraged them to view their accents as markers of experience rather than deficits. With encouragement and structured opportunities to contribute, such as small-group discussions before whole-class sharing, their participation gradually increased. These experiences reinforced the importance of modeling respect, creating low-risk opportunities to contribute, and making it clear that every student's voice is valued. At Virginia Tech, I plan to establish classroom norms that encourage civil dialogue, active listening, and thoughtful disagreement, in alignment with the university's Principles of Community.

Looking ahead, I see my role at Virginia Tech as extending beyond the classroom or laboratory. Cybersecurity remains critical to the well-being of individuals, small businesses, and public institutions, including those in under-resourced communities. Many minority-owned or rural businesses underinvest in cybersecurity because of limited awareness or capacity. I hope to collaborate with colleagues and campus partners to develop outreach modules, workshops, or short courses that bring foundational cybersecurity concepts to high schools, community colleges, and local organizations across the Commonwealth of Virginia. I am particularly interested in lowering barriers for students from non-computer science majors, such as those in the arts, social sciences, or policy programs, by designing introductory security content that is accessible without heavy technical prerequisites.

In my future lab at Virginia Tech, I will strive to build a culture of mutual support, intellectual honesty, and shared responsibility. This includes defining clear expectations, holding regular one-on-one meetings to understand students' goals and challenges, and encouraging collaborative authorship and peer mentoring. I view graduate advising as a long-term commitment: helping students grow not only as researchers, but also as professionals who will, in turn, serve their own communities.

In sum, my journey: from West Bengal to Indiana, from undergraduate leadership roles to founding a cultural organization, from tutoring peers to mentoring research students; has taught me that service is most impactful when grounded in empathy, consistency, and action. At Virginia Tech, I hope to honor *Ut Prosim* by supporting students' success, strengthening the academic community, and extending cybersecurity knowledge beyond campus to the broader Commonwealth and world.