Growing up as a **bilingual, first-generation American woman with a disability**, I have faced significant barriers navigating spaces that often lacked diversity and inclusion. Chronic, debilitating migraines, a symptom of my disability, made succeeding in traditional academic settings extremely challenging. The intense pain often left me unable to focus, while sensitivity to light and sound made attending class or using a computer unbearable. The unpredictability of these migraines, sometimes lasting full days, forced me to constantly adjust my schedule. To overcome these challenges, I developed strategies such as breaking tasks into manageable steps and completing assignments early, which allowed me to succeed academically despite the obstacles I faced.

These strategies enabled me to lead in high school as president of my school's Women in Engineering Club for three years and to found the Cybersecurity Club, which continues to thrive today. My team's success in cybersecurity competitions earned the attention of Argo AI (now Latitude AI), one of the largest self-driving car companies at the time. Before I graduated high school, I became their **youngest-ever Software Engineering Intern**. While this experience confirmed my technical abilities, it also made me realize the significant underrepresentation of women and neurodivergent individuals in tech—a realization that has shaped my academic and professional aspirations since.

Over the past three years, I have **personally led** the Neuro-inclusivity Aware Platform for Education (NAPE) at Carnegie Mellon's VariAbility Lab. This project has allowed me to apply my passion for accessibility to real-world challenges, resulting in a study paper my team plans to submit to the 2025 **International Computing Education Research (ICER)** Conference. The idea for NAPE emerged from my experience volunteering at the Educating Autistic Software Engineers (EdASE) summer camp in 2023. I observed autistic high school students struggling to stay focused during long prerecorded instructional videos, often losing track of key steps. Inspired by these challenges, my team developed a segmented learning intervention to address these issues by incorporating well-timed pauses.

During the NAPE project, I recruited and mentored six undergraduate and graduate students, guiding them through every stage of the research process. We sought to answer whether pauses in videos, aligned with instructional steps, could enhance comprehension and minimize errors. To test this, we designed a series of Scratch programming tasks, paired with segmented and non-segmented instructional videos, and measured participants' performance based on hesitation rates, error counts, and post-task survey feedback. The study was conducted with 20 participants (10 with ADHD and 10 without) and focused on comparing their experiences across the two video formats. Currently, I am leading my team in finalizing the data analysis and preparing our findings for publication. Our results demonstrate that users with ADHD make fewer errors when completing post-video tasks using content learned from segmented instructional videos.

Beyond my work on NAPE, I have expanded my research expertise by collaborating with postdoctoral researcher Andrew Hundt in CMU's Robotics Institute on an Autism Robots meta-review. This project focuses on **establishing ethical standards for testing robotics devices with disabled communities**, ensuring these technologies serve their intended populations safely and effectively. My role in the Autism Robots project involves conducting comprehensive literature reviews, identifying gaps in existing research, and proposing ethical frameworks to protect vulnerable populations during robotics trials.

In addition to conducting research, I have developed strong skills in grant writing and dissemination of knowledge. I secured $5,000 in fellowship funding for the NAPE project and **over $53,000 in academic and research merit** scholarships from organizations such as the National Center for Women and Information Technology. I have also delivered presentations to diverse audiences at institutions like Carnegie Mellon and Cornell University, **engaging over 200 in-person attendees** by breaking down complex ideas into accessible insights.

During my dissertation, my main goal is to increase the percentage of minority groups in software engineering, **specifically women and people with disabilities**. This can be achieved in many ways, such as through the development of more accessible technology which adjusts to various user needs, the creation of adaptive pedagogical materials for programming education, and overall more equitable systems via user-first, data-driven design principles.

After completing my Ph.D., I aspire to be a research scientist in industry, developing large-scale accessibility tools at companies like Microsoft or Google. These tools would address diverse abilities, benefiting millions of users and making technology more inclusive. My ultimate goal is to contribute to a world where **DEI is not a research topic or policy goal but a fundamental and natural part of our academic, professional, and social systems**. I will build solutions that matter, conduct research that amplifies marginalized voices, and promote communities that prioritize inclusion and accessibility. My lived experiences and relentless empathy drive my vision of creating technologies that empower all individuals, ensuring a new digital age in which no one is left behind.