

In the two-week recovery period following my retinal detachment repair surgery, my eyes were enveloped in medical bandages. Having to adjust to the nuisances of seeing complete darkness, I navigated my way around with a constant frustration of feeling lost. I gradually learned to make the most out of a distressing situation. With my optical senses impaired, I found myself relying on screen-readers, voice-activated assistants, and voice-controlled devices to resume daily activities. The use of assistive technologies enabled me to complete my homework and communicate with friends. These tools became my eyes, yet my reliance on them came with its own set of challenges. I was forced to constantly rephrase my inputs to align my thoughts with phrases that the “natural” language processing algorithms could correctly interpret. The screen-readers, while helpful often overwhelmed me with information, and voice-activated assistants subjected me to slow navigation that made it difficult to locate necessary content, hindering my ability to effectively contextualize the information I needed.

My temporary visual impairment allowed me to experience the evolving challenges of digital accessibility first-hand and fueled my curiosity in addressing these gaps through a better understanding of the technology. Despite the challenges, I felt immense gratitude towards these technologies for accompanying and assisting me through adversities. Witnessing their impact on my own life became a source of inspiration. I channeled my gratitude into commitment to making these tools more inclusive to aid individuals experiencing disabilities.

Thus, I found my calling in a career of improving assistive technologies for those in need. As I pursued a Bachelor of Science degree in Informatics at the University of Washington, I learned about how flaws in these assistive technologies exist due to inadequate algorithms for user preferences, which stem from machine learning and data science. I pursued a specialization in data science and went on to take data science and recommender systems coursework. I learned about how potential improvement of models and algorithms could create seamless interactions between users and assistive technologies and overcome the inconveniences I faced during my eye injury.

Driven by enlightening classes that paved the way for my academic journey, I took advantage of opportunities at UW to help others and expand my understanding. I joined the Center for an Informed Public as a research assistant for the Election Integrity Partnership, to do data analysis that addresses dangerous and harmful rumors on social media. In the summer of 2023, I performed research with the Humanities Data Science Institute to discover language patterns of Twitter data during the Black Lives Matter movement. In pursuing these experiences, I applied my knowledge of data science to provide valuable insights and help groups of people in different contexts. This also enabled me to practice my skills in a real-world context. I was excited to decipher textual data in different projects and move a step closer to eventually transforming data to shape our real-world interactions with assistive technology. From these amazing opportunities, I reaffirmed my commitment to advancing technology that targets inclusivity and diversity for all.

Receiving exceptional education and guidance from my professors translated into my own dedication to teaching. I devoted my knowledge to inspire other students interested in the field as a teaching assistant for INFO201: Foundational Skills of Data Science. I wished to create a supportive and inclusive learning environment and understand the needs of all students.

I encountered challenges in introducing programming to students with assorted levels of technical experience, learning paces, coding comfort levels, and English comprehension abilities. I witnessed how language barriers hindered their abilities to understand the course content as well as their abilities to seek help effectively. I did my best to offer personalized and adaptive teaching, by restructuring traditional learning materials such as lab slides, readings, and resources to accommodate diverse backgrounds and unique learning processes. I developed a more innovative, hands-on approach by incorporating different interactive coding demonstrations during lab sections and encouraged students to actively engage with the material.

Most importantly, I wanted to share my passion and interests in studying the subject to help others achieve their goals and feel pride in their work. In some instances, students struggled with the curriculum, and I tried my best to explain the logic behind the code and provide detailed tutorials, attempting to promote integrity and inspire them to believe in their capabilities. I allocated time for students to ask clarifying questions and rely on the teaching team for support when needed. As a result, they began to comfortably participate more during classes and trusted my subject knowledge and feedback. During four consecutive quarters as a teaching assistant, I had the privilege to facilitate an inclusive learning environment and supported diverse backgrounds, with goals of passing forward the positive educational experiences I received to future students.

In my sophomore year, I was elected as the president of the Informatics Undergraduate Association to represent the undergraduate student body in the Information School. I had observed the concerns of my peers in the preceding two years. I was acutely aware of their worries about getting admission to their desired majors, and how it would impact their career aspirations. From witnessing this stress shared by many students, I wished to make a difference. Collaborating with my board, we devised essay admission workshops and requested experienced students to volunteer and provide essay feedback. Together, we were able to offer support, alleviate stress, and instill confidence for those undergoing the rigorous application processes each cycle.

During these events, we received an overwhelming number of sign-ups that filled up rapidly and resulted in extensive waitlists. Despite the high demands, I was determined to assist as many students as possible. I proactively communicated through emails to offer feedback to those who sought support. After the admission period, my email inbox began flooding with emails expressing gratitude for my help in their successful journeys of getting into the Informatics major. I felt pride in being able to make a positive impact on a community I deeply valued and help students build more confidence for their career aspirations. Beyond reviewing

numerous essays, my interactions with the student body unveiled diverse stories and motivations that fueled their academic studies. From learning about multitudes of career goals and challenges they wished to address through their education, I was very inspired by their unique experiences, and incredibly excited to see the issues they will tackle.

My time at UW has enlightened me on the rewards of helping others and bringing communities together. As a teaching assistant, I facilitated an inclusive learning environment and supported diverse backgrounds, with the goal of passing forward the positive educational experiences I received to future students. Throughout my retinal detachment recovery, I navigated through challenging circumstances and recognized the potential for assistive technology to become dynamic allies for others. My academic and career interests naturally gravitate towards addressing issues related to diversity, inclusion, and equity, and to effectively use my skills to bring adaptability to the digital world and help others.