Software shapes every bit of our daily experience. From the alarm on my phone that wakes me up in the mornings to the app that I check to see when the bus will come, I interact with software an unimaginable amount every day. Software systems like social media, electronic payment processing, and internet searching impact not just me, but society as a whole. I want to study Computer Science because I want to shape the systems that create value for hundreds or millions of people.

I am a strong candidate for success in the CS department because I have relevant work experience, I have demonstrated academic success, and I have a solid foundation in the soft skills necessary for any field.

My past experience has given me a taste for what it is like to develop software: rewarding. In the past, I applied to this program and wrote about my work experience for the Washington Yacht Club, the student sailing club on campus where I overhauled the club's database's web frontend. Since then, I have continued that work by using my knowledge of database design from CSE 414 to replace the inefficient and unmaintainable backend database with a modern, more secure one. I have also started to work with a compression/file transfer startup called AtomBeam to further hone my CS skills and gain valuable work experience. With AtomBeam, I am setting up an automated test suite for our software, using Amazon Web Services' Elastic Compute Cloud (EC2). These experiences will help me succeed in the computer science industry because writing and testing software based on industry best practices is something that every software company ought to do.

Beyond work experience, I have demonstrated through my time at UW that I am capable of succeeding academically, especially in STEM classes. I've earned higher grades in my STEM classes overall compared to my humanities classes because I'm fascinated by learning and applying new concepts in CS and math. After doing well in CSE 143 at the start of my freshman year, I spent a few quarters exploring other fields but ultimately confirmed that my foremost passion is for CS. Since the advising team told me that they had a hard time discerning if I was truly positioned to succeed in CS based on my transcript, in my fall quarter this year, I refocused on STEM classes, and feel that my performance shows that I am prepared to do well in the program.

I know that strong academics are not the only deciding factor for admission, so I'd like to emphasize the fact that I enjoy working collaboratively and have good leadership skills. One example of this comes from my experience as an intern at LightRiver Technologies (a midsized fiber optic networking company) this past summer. After about six weeks on the job, my manager put me in charge of a project to create an online knowledge base for

common troubleshooting issues for the equipment we worked with. I suddenly found myself organizing meetings with other interns and senior coworkers, all the while defining the goals and timeline of my own project. After a few weeks of meetings and trial runs, I was proud to be able to save everyone time and effort with the wiki-like software I implemented. I was happy to see that my coworkers were grateful, and that my manager trusted me to lead a project to fruition. This type of leadership experience is very transferable to CS too; I might find myself in charge of implementing a requested feature or building a test suite like my project at AtomBeam.

Since the last time I applied to this program, I have demonstrated in more concrete ways why I would be a successful CS student. My extracurricular activities have helped teach me skills necessary in the field, I've shown that I can do well in a rigorous academic setting, and I've built leadership skills that will be useful for any collaborative project. Additionally, I revised my opinion of why I want to study CS. Before, I wasn't sure if I would be able to have a meaningful impact on society as a whole, so I focused on how I could help those around me succeed as a project manager. Now, I have come to the realization that even small software projects can have a huge impact and I want to take advantage of that reach to benefit society as a whole. I hope to work on projects like designing a more gas-efficient algorithm for routing Amazon delivery vans, implementing machine learning techniques to help doctors diagnose patients with rare diseases or, a personal idea of mine, a more effective yet socially conscious way of matching job candidates with employers. Solving these problems will require me to use not just the talents I've developed from my past experience, but also key computer science knowledge from classes in the CS major, which is why I strive to be a computer science student at UW.