

Since childhood, I have been using brushes and paints to express my understanding of the world. More than a hobby, painting was a tool of communication, more powerful than words: simple brushstrokes and splashes of color could convey everything from grand ideas to intimate emotions. It was boundless and liberating. Computer Science inspires me to come up with new ways to express my thoughts, which not only allows me to imagine the world from a different perspective but also serves as a bridge for me to help the community and advocate for diversity.

I am passionate about learning CS and applying it to real life. As I stated in my previous application, I want to develop an app that helps ensure community safety by alerting one's surroundings as it detects danger. This software aims to provide immediate police and medical services to expedite the process of getting care. To get more knowledge in app-building, I took CSE340 and learned to create Android apps. The course boosted my interest in designing software and applications. With the principles in mind, I decided to familiarize myself with the app building process. Thus, my two friends and I made a Gomoku game app after the spring quarter. In particular, my friends implemented the model and the beginning animation, and I wrote most of the codes in the view and controller. I used canvas Ondraw to draw the entire game board with small blocks, implemented the undo and redo functions using the Deque data structure, built listeners to show the ending page when one side wins, and designed the end page view using XML and inflated it programmatically. Developing this app has taught me new features and ways to improve user interface and experience, which can be applied to the safety app and future projects.

This year COVID 19 has affected everyone's life. I was eager to do something to help my community deal with this pandemic. Fortunately, I had the chance to volunteer at the UW CovidSafe app developing team. We intended to build a contact tracing tool to alert people if they have been exposed to the virus. Knowing principles from CSE340 and my research, I joined the Android developing sub-team. We collaborated to fix bugs in the current code base and develop feature requests. Now, our codebase is transited to full-time engineers at the Brotman Baty institute to take over. From this experience, I not only contributed to ensuring communities' safety but also learned how to communicate with team members efficiently and code collaboratively. It also helped me understand and adapt to the time pressure of working on real-life app development. Working with other experienced programmers, I am motivated to improve my coding skills and problem-solving strategies in order to build impactful apps in the future. Thus, I wish to join Allen School to broaden my horizon and expand my knowledge in app development, algorithms, and HCI, which would allow me to build a solid foundation for contributing my value to the Allen school and the world.

Apart from my CS interest, I am also a member of the Husky Robotics Team. While most team members have years of experience in robotics, I struggled initially to make contributions. Thus, I put in extra time to familiarize myself with the tools we use. I was able to apply technical skills and problem-solving strategies obtained from CS projects to the field of robotics. My team is a diverse group with more than 100 members. As a female who came to America a few years ago, I was worried if I could fit into my subsystem. However, by communicating and supporting

each other, my teammates and I formed good relationships. In the brainstorming stage, I shared design tips I learned in ancient Chinese architecture and art styles. We were able to build on that idea as others shared their cultural perspectives, which allowed us to eventually have a sturdy structure with fewer materials. Sharing my view with others helped me to gain an appreciation for my heritage and pride in my differences.

Technology is a double-edged sword: while powerful, it sometimes perpetuates biases, including racism and sexism. It is paramount to recognize such bias and prevent them from taking root in technology development like apps. As an immigrant who has lived in multiple cultures, I am determined to reduce such inequality using my technical knowledge and cultural perspective. As I am 3 credits away from being a junior, I hope to join the Allen School to study what I am passionate about and make real-life impacts that benefit the society.

Winfo hackathon

Datathon

Badminton

International Student Association

Inter-club council & co-founder

4

Sign Club

Treasurer

3

Physics Team

Team member

2

Tennis Team

Double and single player

5

FSL International

Office assistant

14

Cybersecurity program at Stevens Institute of Technology

Participant

60

Qin West Noodle

Dining assistant

20

Amigos De Los Rios

Volunteer 3