Alice Zhang

CSpotlight: Learning Through Involvement

Q&A with Alice Zhang, Computer Science B.S.

Name: Alice Zhang
Pronouns: She/Her/Hers
Hometown: Northfield, Minnesota
Major(s)/minor(s): Computer Science (B.S.)
Graduation year: 2024
Interests: Literature, running, swimming, skating

Why did you choose to pursue a degree in computer science specifically at the University of Minnesota?

My introduction into computer science was through a course offered in my high school. I was drawn to the field because I loved problem-solving and was inspired by the opportunities there are to apply technology to a diverse range of issues. I was hesitant to declare my major at first because I found myself in the minority in a lot of spaces, but learning about the ACM-W, the Society of Women Engineers and the mentorship programs at UMN sealed the deal for me. I was also fortunate to have a number of friends at UMN that told me how supportive and inclusive the school is. It especially meant a lot to hear about how welcoming the Computing Science department is for women of color and first generations students.

One thing that drew me to the University specifically was the broad range of computer science topics in the department. I knew I wanted to do computer science and the social-human aspect of it, but I didn't know what human-computer interaction was at the time. So when I was searching for programs and saw all of the research areas and classes offered, I knew I would be able to explore what I want to do.

How did you become interested in computer science? What are your specific interests within the field?

I came in with an interest in applying computer science to social issues. So far I have explored more of the human-computer interaction side with my previous research internship, and I know I will continue to work in that space. Beyond that, I am also interested in software engineering. To explore this interest, I did a software engineering internship with TIAA (Teachers Insurance and Annuity Association of America) last summer that focused on front-end development.

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Congratulations on earning the Optum scholarship! How will this scholarship impact your academic and extracurricular work?

For me, the scholarship provides all-around support. Obviously it supports me in school, but it also gives me the room to give back to my communities academically and beyond. I am able to support other women and build a network at the University. It also allows me to give my family support. Part of the reason I chose to go to the UMN is because it is in state and I have family responsibilities. All in all, this scholarship helps lessen the financial burden for me and allows me to do anything I want to do.

Tell us more about the Girls Who Code chapter you founded in high school?

I was first introduced to computer science in my second year when I learned about robotics. But my last year of high school, I got together some of my friends with different skills to form a club. So I pulled together people with organizational, leadership and graphic design skills, and girls from culturally diverse backgrounds to informally start this Girls Who Code chapter at our high school. I was lucky to have administrative and staff support. Before the pandemic hit, we were able to host two successful events. Even during the pandemic I was able to work with the other officers to send out ways to get involved in computer science as well as relevant tech news.

You are heavily involved in student groups on campus, especially groups that help mentor other students. What inspired you to get involved? What do you hope to contribute to the computer science community at the University?

I first got involved in CSE as a mentee. My first year I was a mentee in the CSE Mentorship Program, CSE Ambassadors, and Society of Women in Engineering. It especially helped me to have mentors that understood what it means to be a minority in engineering that helped me build a network in the field. Therefore, it was a natural fit to be pulled back in as a mentor down the line.

What inspires me to contribute is the opportunity to help other students as well as learn from them. Last year I mentored two students. One was more career focused so we did resume reviews and job applications and that is still relevant for me as a peer. For the other student we talked about work-life balance which is obviously relevant to everyone. If you understand something then you can teach it, so a mentorship is truly mutually beneficial.

Right now I am the webmaster at ACM-W and I applied to be a mentor with the CSE Mentorship program. I am also a teaching assistant and I am doing undergraduate research.

Tell us more about your research experience with the Distributed Research Experiences for Undergraduates (DREU) program. What other research have you been involved in on campus?

accessible-art-through-virtual-reality)

- CSpotlight: Leveraging Linguistics in Computer Science (/cs/news/cspotlight-leveraging-linguistics-computer-science)

The DREU program is a summer research program that I was fortunate to get accepted into with recommendations and support from UMN professors the summer of my freshman year. I was mentored by Dr. Amy Zhang and Dr. Shagun Jhaver (Rutgers University) as part of a research team in the Social Futures Lab at the University of Washington, Seattle. Our study focused on personal content moderation preferences for end users on social media sites like Twitter, Facebook, and Instagram. We designed a mock interface (similar to Twitter) with different types of moderation interfaces and interviewed participants on their experiences with it.

Overall it was an amazing experience, and I'm extremely grateful to have seen the project from beginning to end. As a result of my continued interest in research, and support from various mentors I am working with Dr. Stevie Chancellor and Ashlee Milton in the GroupLens Lab this fall.

Can you elaborate on some of your internship experiences? What has been your main takeaway from working in the field?

In my non-technical science internships I learned a lot of useful soft skills. My freshman year I did a marketing internship and was the Technical Content Team Lead at humanID, a nonprofit startup. In these roles I learned that taking initiative is important. Make sure you look for jobs that give you the support and space to speak up for yourself.

With my computer science internships, I learned that if you don't understand something, speak up right away and try not to ask the same question twice to respect others' time. Also, don't worry about what you don't know. Even if you ace all of your classes, when you go into a job you won't know everything. In the industry, you'll likely work with an unfamiliar codebase with varying levels of existing documentation, so the best thing to do in that scenario is just communicate when you have questions. It's also important to figure out the best way to communicate in different instances - is my question something that can be discussed over instant messaging or email, or do we need to zoom/meet in person?

What advice do you have for incoming computer science students?

When I was coming into the UMN, it was helpful for me to follow a rule of threes. If you don't know how much or little to do, pick three things to start with: one for your health and wellness, one for academics and one for career or personal development.

What are your plans after graduation?

Since I still have two more years I am giving myself space to decide. I enjoyed my summer research experiences so I am leaning more toward continuing research. Otherwise there is customer service research on the industry side that could be interesting and I am hoping to explore that.

Are there any additional experiences you did that you would like to highlight?

Those first two (semi)online years for people like me who came in during the pandemic were uniquely challenging. I was fortunate to have amazing instructors and supportive professors during this time. In addition, I'm also grateful for all the mentors and sponsors beyond my classes. Without their support, I wouldn't be where I am, and so I hope the CS&E Department continues this tradition!