

Ashley Helfinstein

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<https://github.com/ahelfins>

Education

Macalester College, St. Paul, MN May, 2020
▪ Major: Undeclared GPA: 4.0

Relevant Coursework:

- COMP 124: Object Oriented Programming and Data Structures
- LING 100: Introduction to Linguistics
- **UC San Diego Academic Connections:** Intro to Cognitive Science

Homestead High School, Cupertino, CA June 2016
▪ Valedictorian GPA: 4.0
▪ AP Computer Science (5), AP Physics C: Mechanics (5), AP Calculus BC (5)

Skills

Language: Spanish

Computer: Java, IntelliJ and Eclipse IDEs, Git, some Python

Activities

Volleyball, Macalester College August 2016-Present
Middle Blocker

- Play on Macalester Scots NCAA volleyball team
- Work out with team in season, and do weight lifting and open gyms off season

She's Geeky Unconference, Mountain View, CA January 2013, 2014, 2016

- Participated in women's technology event, led and attended sessions

CoderXX Conference, Computer History Museum October 2015

- Attended inaugural women's coding conference by CodeChix organization

Book Club, Homestead High School June 2014-June 2016

- Founded and served as president
- Led club, facilitated book discussions, book drives and club social events

Volunteer Experience

Little Scots, Macalester College October 2016-Present
Big Scot (Mentor)

- Mentor young girls in St. Paul area who are interested in sports

California Scholarship Federation, Homestead HS September 2013-May 2016

Club Member (Volunteer)

- Volunteered at events around the community
- Met minimum GPA requirement for club in all years

Congregation Etz Chayim, Palo Alto, CA September 2011-May 2012

Madricha (Teaching Assistant)

- Worked individually with students, led and helped with class activities

Google Engineering Practicum Essay Questions

1. How were you first introduced to CS? How have you continued to develop your technical skills and seek additional exposure to the field?

I attended The Girls' Middle School, an all-girls private school that emphasized STEM education. Every year, all the students take Computer Science classes, and I found that I really enjoyed the problem solving process. This encouraged me to continue with Computer Science through high school, where I took an introductory class and the AP Computer Science class in Java (the only CS classes available at my high school). I also attended several women's technical conferences with my mother, who is a software engineer. Now attending Macalester College, I have continued to explore the world of CS. I have built upon my enthusiasm for technology by engaging myself in CS courses. I also have become involved in the Women in STEM program and have been paired with a senior mentor who is a Computer Science major. We meet frequently to discuss how we see ourselves fitting into the field of CS in the future. These meetings led me to become involved in Mac Hack, which is the software development organization at Macalester. I am hoping to discover if software development is the right career for me.

2. Tell us about a time you've used your strongest coding language. Please go into detail about how you used this technical language. If talking about a group project, be specific about your role in the final product. (Examples can include projects, coursework, competitions, websites, previous internships, etc.)

In my AP Computer Science class, I used Java to implement a predictor for movie ratings, a project inspired by the Netflix prize competition from several years ago. We were given a partial data set about movies and users and asked to predict how a given user would rate a movie based on their previous ratings and the movie information. I read input from XML data and converted it to inputs for classes such as Movie and User. I then used loops to extract several pieces of information from the data. I used data caching for the average rating of the movies to make the program more efficient so it would be under the runtime limit for the calculation. To make my predictions, I averaged several relevant pieces of information: the average rating for the movie and the average ratings that user had given to movies based on genre, time period, and movies in general. I used this information to predict their rating. My teacher had a contest to see whose program gave the most accurate predictions when compared to the complete data set. I won a prize for being in the top 3.

3. At Google, we believe that a diversity of perspectives, ideas, and cultures leads to the creation of better products and services. Tell us about your background and experiences and how they make you unique.

I have always been a positive person who loves to learn. At The Girls' Middle School, with only 53 other girls in my class, I learned to have a growth mindset and strengthened my love of learning for the sake of learning. I went on to high school, and, after initially becoming too focused on grades without learning from my mistakes, I regained this mindset. It helped in my volleyball career. I started playing much later than most girls, but I still managed to improve my skills quickly and play on competitive teams. In the beginning, I struggled to get playing time, but I used this to make me better. I learned to always maintain a positive attitude, instead of getting defeated. I now compete on Macalester's varsity volleyball team, pursuing a passion. Macalester is a small liberal arts college far from home, but here I have learned how to continue expanding my world-view, meeting people from all over the world. My mindset and fortitude distinguish me. I have learned mental toughness and perspective in my life. I have learned how to not be fazed, and remain positive and supportive of others around me in challenging circumstances.

4. Please list the technical courses you'll be taking next semester. If you haven't registered for classes yet, please list the courses you plan on taking.

I haven't registered yet, but I plan to take:
MATH 279 - DISCRETE MATHEMATICS
COMP 221 - ALGORITHM DESIGN AND ANALYSIS
COMP 225 - SOFTWARE DESIGN AND DEVELOPMENT

5. Please list any clubs and/or organizations that you participate in.

On the Macalester campus I participate in:
Macalester NCAA Women's Volleyball Team
Women in Science and Math
Mac Hack
Little Scots Mentorship Program
Macalester Jewish Organization
Macalester Gaming Society