

Jackie Becker

PO Box #16104 • 531 Lasuen Mall • Stanford, CA 94309 • 425-377-4739 • jbecker5@stanford.edu

Objective

Seeking summer internship and an opportunity to learn from industry professionals while working on a project with real-world implications.

Education

Stanford University

Class of 2017 (Cumulative GPA: 3.6)

- Computer Science major (Theory track)
- Creative Writing minor (Prose track)

Experience

Stanford Virtual Human Interaction Lab – Programmer

June 2015 – present

- Develop virtual worlds in Vizard to be used for social experiments with the Oculus Rift
- Work with 3DS Max to create 3D models for these environments
- Integrate 360 video into virtual worlds
- Design algorithms to introduce realism into the virtual worlds.

Freelance Web Development – Programmer

July 2015 – present

- Design elegant UI/UX for customers and administrators (CSS/HTML)
- Work on design for cloud integration of menus, orders, and customer info, which will save the client over \$6k in annual overhead costs

Stanford Virtual Human Interaction Lab – Research Assistant

April – June 2015

- Helped conduct experiments/interact with subjects, managed equipment

Stanford Lifetime Development Lab – Research Assistant

January – March 2014

- Conducted preliminary research before experiment, recruited participants, data entry

Languages

- Classroom experience programming in C, C++ and Java
- Familiar with Python

Interests/Awards

- Received runner-up and honorable mention in two separate programming contests in CS 106B (C++) out of a pool of approximately 300 students
- Involved in Model UN at Stanford, particularly in running an annual conference for high school students
- Active participant in theater: performed in a number of plays at Stanford
- Conversational in Spanish

Course Projects

HTTP Proxy - Fall 2015

Implemented a HTTP Proxy, which is fully functional and can be used to browse the web. Running a speedtest found that the proxy in no way slowed down download/upload speed or worsened the ping score.

Skills – C++, networking, multithreading

Map Reduce - Fall 2015

For CS110, implemented a MapReduce program--specifically, the portions dealing with map reduce servers and workers. Personal program included further optimizations beyond the specs of the assignment after discussing these optimizations with the professor of the course, who is now considering adding those optimizations to future iterations of this assignment.

Skills – C++, multithreading

Heap Allocator - Spring 2015

Designed a Heap Allocator for CS107. Very high throughput and utilization (100% and 72%, respectively--well above specs for the assignment, which were 80% and 65% for full marks). Project included a lot of creative design, as the structures to allocate memory and the best way to manage pages of data was independent. Of course, project was done without built-in functions such as malloc, realloc, free, calloc, sbrk, brk, mmap, or related variants.

Skills - C, designing algorithms