

Education:

California Polytechnic State University, Pomona
Senior Standing
Bachelor of Science in Computer Science
GPA: 3.23/4.00

Expected Graduation Date: March 2016

Personal Site: <http://emilycup.github.io/>

Work Experience:

Cal Poly Pomona Computer Science Department | *Student Assistant*

Sep 2014 – Dec 2014

- Grade projects and tests for a C++ Programming course
- Used and created Bash scripts to automate project grading

Esri | *Quality Assurance Intern*

Jun 2014 - Sep 2014

- Implemented a cluster to determine the speed and viability of an in-house test runner
- Ran and reported results from automated tests across a series of operating systems
- Reimaged and managed an inventory of my team's machines

NASA Jet Propulsion Laboratory | *Software Engineering Intern*

Jan 2014 - May 2014

- Developed an automated GUI for the Ice Sheet System Model (ISSM), a polar climate application
 - Customized an open source Java application to the polar climate application, ISSM
 - Created XML files using MATLAB from calculated data
 - Used the Unix shell in a Linux environment
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Projects:

Computer Networks

- Implemented and encrypted Ipv4 w/ udp and Ipv6 packets using bit manipulation and socket programming in Java

Web Development

- Built an initial prototype for an ecommerce website using Axure
- Created and designed the website using HTML, CSS, JavaScript, and jQuery

Algorithm Analysis

- Analyzed theoretical vs. experimental runtime complexities of 4 sorting, 4 graph, 2 searching, and a matrix multiplication algorithm. Made Bash scripts to collect and organize the data into spreadsheets.

Competitions

- ACM Programming Competition 2013 & 2014 — competed with my team of 3 to solve as many problems in 5 hours
 - Hackpoly 2014 — Cal Poly Pomona's first hackathon where my team of 2 created a charity website in 24 hours
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Skills:

Core Coursework: Discrete Mathematics, Data structures & Algorithms in Java, Interactive Web Development, Computer Networks, Design and Analysis of Algorithms, Numerical Methods, Computer Logic, Databases

Programming: Java, C++, UNIX, HTML5, CSS, JavaScript, MIPS, SQL

Software: Eclipse, Microsoft Visual Studio, GitHub, Aptana Studio3, Vim, Dreamweaver

Additional Information:

- Will gain more experience by working this summer at DirecTV as a Software Engineering Intern on the User Interface Development team for the Set Top Box platform
- In my free time, I write and perform original songs at coffee shops, competitions, and charity events. I also adore the outdoors and enjoy activities such as cycling, rock climbing, and hiking.