

Objectives:

- To obtain a position as a summer software intern at an institution in which I can apply my understanding of Computer Science and learn industrial standard software development skills and practices.
- To seek opportunities to work with leaders in the computing industry, learn cutting edge technologies, and to develop state-of-the-art solutions for real-world problems.

Education

University of California, Berkeley

Berkeley, CA

Electrical Engineering and Computer Science (EECS) Major

May 2016

- UC GPA: 4.00
- Past and Ongoing Coursework:
 - **Fall '12:** CS61A: *The Structure and Interpretation of Computer Programs (Python)*, Anthropology R5B: *The Environment as a Human Right*, Physics 7A: *Physics for Scientists and Engineers, Mechanics*, Math 54: *Linear Algebra and Differential Equations*
 - **Spring '13:** CS61B: *Data Structures (Java)*, CS9F: *C++ (C++)*, EE20N: *Signals and Systems (LabVIEW)*, Physics 7B: *Physics for Scientists and Engineers, Heat and Electromagnetism*, CS70: *Discrete mathematics and probability theory* (Waitlisted)

El Segundo High School

El Segundo, CA

Graduated in June of 2012

June 2012

- GPA: 4.63

Loyola Marymount University

Los Angeles, CA

Enrolled in Concurrent Coursework

January 2011-May 2012

- GPA: 4.00
- Completed Coursework: Math 131: *Calculus I*, Math 132: *Calculus II*, Math 234: *Multivariable Calculus*

Work Experience

Northrop Grumman Corporation

El Segundo, CA

Software Engineering HIP Intern

February 2012 – June 2012

Worked with Software Engineering team on mission control software

- Analyzed Delaunay Triangulation Algorithm for corner cases
- Participated in the Airplane Design and Remote Control Demo course

Mattel Corporation

El Segundo, CA

Global Information Technology Intern

November 2011 – January 2012

- Implemented PrePlan Database and user interface
- Designed an Electronic Project Management Plus logo

Projects

Scheme Interpreter (Python)

- Designed and implemented an interpreter for the Scheme Language
- Extended the Scheme language to support Dynamical Scoping

LifeOST (Android)

- GPS-based Android music player designed to allow users to map songs to locations
- Developed using the Phonegap, Android, and Bootstrap frameworks

ÜberPong (HTML5/Javascript)

- Web-based 3D Pong redux using the Leap Motion controller as the player interface
- Developed using HTML5, Three.js, and the Leap Motion developer API

Activities

Hackers@Berkeley

Hackathon Participant

Produced functional web applications within a 24-hour timeframe

- Projects available at <https://github.com/Arctangent1759>
- Attended tech talks and API workshops

UC Berkeley
August 2012-Present

FIRST Robotics Team 1759

President

Directed team operations through the 2012 FRC robotics competition season.

- Finalized CAD models for machining
- Developed 2012 financial plan and build schedule
- Redefined team roles and command structure

El Segundo High School
April 2011 – April 2012

Lead Programmer

September 2009 – June 2012

Developed real time robot control software on the National Instruments Compact RIO platform.

- Developed team LabVIEW proficiency
- Perfected robot target tracking and image processing algorithms
- Integrated sensor data and actuation using PID motion control
- Instructed new programmers for the 2013 team

Cyber Patriot IV - National High School Cyber Defense Competition

Team Captain

El Segundo High School
September 2011 – April 2012

- Directed team operations
- Developed competition strategies
- Led competition rounds Utilized cyber defense and computer security expertise during the competition rounds

Technical Skills

- Programming Languages: Javascript, HTML5, Python, Java, LabVIEW, Visual Basic, C++, Shell
- API Proficiencies: Node.js, JQuery/AJAX, Bootstrap, Android, Phonegap, Leap, Three.js, BeautifulSoup
- Development Environments: vim, GitHub, Eclipse, Netbeans, Microsoft Visual Studio
- Computer Security: Windows Firewall, Nessus, Shell

Additional information

- Other Software Proficiencies: GIMP, Autodesk Inventor, LaTeX, Windows, Ubuntu
- Languages: English, Spanish, Spoken Cantonese
- Interests: Front and Back End Web Development, Robotics, Game Development, Skiing

References

Available upon request