

Brian Zhang

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Skills

Programming Languages

Java Strong C++

Python HTML/CSS

Javascript С

Assembly Netlogo Scheme

Fairly Used

Intermediate

Technologies Used

Flask, jQuery, Firebase, Unix/ Linux, Unreal Engine 4, AngularJS, MongoDB, Android, flex, bison, regex, Retrofit

Knowledge of data structures and search/sort algorithms; Intermediate understanding of higher-level and theoretical CS (machine learning, genetic algorithms, computer vision)

Academic

Knowledge of classical mechanics & applications through engineering (Robotics, bridge rectifiers, pulse-width modulation)

Current Coursework

Software Engineering Operating Systems

Past Coursework

Intro to EE Intro to Programming Data Structures/Algorithms Discrete Math Linear Algebra/Multi/Diff Eq. Intro to Java/Networks/

Threads Professional C++ Intro to Games Programming Algorithms Computer Architecture Game Engines Building a Tech Startup Artificial Intelligence

Education

University of Southern California

Electrical Engineering

Regents Honors Diploma

Experience

Expedia, Inc. | Software Engineering Intern

Hotwire Transport team. Developed a new, core transport stack for the Android Application.

USC Robotics Research Lab | Research Assistant

Built and optimized code with Kinect and the CLM-framework to develop a system that tracks detailed sensory information to enable research.

Fashion & People | Software Engineering Intern

Full-stack developer. Worked on building various new pages for the website using agile development methods.

MixSpot | Software Engineering Intern

Performed full-stack development to create a mobile-optimized news website.

Octopart | Software Engineering Intern

Contracted, part time job developing rules for a regex engine to classify large quantities of electronic parts.

Los Angeles, CA Computer Science, expected May 2017 graduation 2014-Current **Stony Brook University** Stony Brook, NY

2013 - 2014**Stuyvesant High School** New York, NY 2009 - 2013

San Francisco

June 2016 - August 2016

Los Angeles

March 2016 - May 2016

Los Angeles

January 2016 - February 2016

New York

July 2015 - August 2015

New York

September 2014 - October 2014

Projects

Borrow Tomorrow (WIP) | Software

January 2016 - May 2016

Built an online peer-to-peer borrowing/lending service, aimed at enabling the mostly untouched shared-items economy.

Jauntlet | Software November 2015 – December 2015

Built a game from scratch using C++11 and the Unreal Engine. I focused on character movement, and general game logic, but still moved between all aspects of the project including getting character meshes and setting up the gameplay map.

Portal Immersion | Hardware + Software

November 2014 Used Kinect, Oculus Rift, and Myo to create a hyper-realistic virtual gaming

experience. I primarily worked on the Kinect for movement and gesture control.

Myo: Fighter of the Streets | Hardware + Software

Calhacks 2014. Created a control system for Street Fighter II using Myo armband from Thalmic Labs in a team of 3. Game performs actions based on motion and gesture inputs.

Loudspkr | Software April 2014

Created at HackNY 2014 in 24 hours in a team of 4. Allows the user to join a regional chatroom based on nearest foursquare venue. Technologies used: Foursquare API. Python, Flask, HTML, jQuery, Javascript, Firebase.

Facial Recognition Sentry Gun | Hardware + Software

February 2014

October 2014

Modded a standard automatic nerf gun with 3 other students at HackCooper 2014. Uses OpenCV and an arduino-controlled stepper motor for detecting faces and aligning the gun's camera.

Web Explorer | Software

June 2013

High school software development class group final project. Created a physics engine using Javascript & jQuery to transform any webpage into a 2D platforming game.

Presented at Google HQ in NYC in June 2013. Presented at NYTM in July 2013.