Zee Yan

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Education

University of California, Berkeley
Bachelor of Science in **Electrical Engineering and Computer Science (EECS)** Expected May 2017
Cumulative **GPA: 4.0**
Relevant course work:

Data Structures (**Java**)	Computer Architecture (**C**, MIPS)
Discrete Mathematics and Probability	Designing Information Devices and Systems

Technical Skills

Java, **Python**, **JavaScript**, Perl, C, C++, Scheme

Selected Projects

WICED Mouse – Broadcom Intern Hackathon July 2015 – August 2015

- Constructed an airborne computer mouse using the Broadcom WICED Sensor Pack
- Created an **Android** app and computer receiver to relay UDP packets containing sensor data
- Utilized **Java** Robot class to control mouse using gyrometer and magnetometer data

Autocomplete, Spellcheck & Boggle – CS 61B Project April 2015

- Designed efficient **Java** solutions for common spelling problems
- Optimized hashmap-based and ternary retrieval tree (trie) solutions

Cat Image Processing – CS 61C Project April 2015

- Optimized a Convolutional Neural Network in **C** using **SIMD** instructions and **OpenMP** directives
- Utilized **Apache Spark** to parallelize a **Python** version run on Amazon EC2 (MapReduce)

Gitlet – CS 61B Project April 2015

- Created a **Java** version control system modeled off Git
- Utilized a serializable tree structure to support commands such as branch, merge, and rebase
- Supports remote file sharing commands such as clone, push, and pull for SFTP

Paint Chrome Extension – Personal Project November 2014

- Utilized **HTML** canvas, **JavaScript**, and Chrome Storage API to create a paint application
- Created drawing tools objects such as pencil, line, arc, eraser, text, and flood fill
- Implemented UI including undo/redo, upload/download images, and dynamic drawing

Experience

Verification Intern – Broadcom Corporation May 2015 – August 2015

- Optimized register verification (register database interpretation to System Verilog) using **Perl**
- Modularized and parallelized generation of System Verilog file: achieved speed-up of up to 50x
- Improved quick and efficient error checking mechanisms for the register databases

Cal Solar Vehicle HCI Sub-team Lead – *UC Berkeley* September 2014 – Present

- Planned meetings and devised and assigned projects to other members of the sub-team
- Collaborated in groups to program the Telemetry and Dashboard microcontrollers using **C++**