Joshua Yuan

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EXPERIENCE

Google, Google Wallet: Android — *Software Engineering Intern*

Summer 2017

 - Wrote software in Java to implement full stack architecture for Android
 - Built features in Wallet, integrating with Google APIs
 - Developed server-side code implementing RPCs and Pub/Sub patterns
 - Followed Material Design specifications and built sleek user interfaces
 - Used Robolectric, Mockito, and Espresso for Java unit-testing

Jacobs Institute for Design Innovation — *Student Supervisor 2*

September 2015 - Present

 - Supervises and helps makerspace users throughout the week
 - Teaches weekly 3D printing and laser cutting classes
 - Works with design specialists on functional projects

UC Berkeley EECS Department, CS61A — *Course Tutor*

August 2017 - Present

 - Works with students via office hours, mentoring, and review sections
 - Teaches fundamental programming skills in Python

PERSONAL PROJECTS

Carousel — *PennApps XV*

 - Developed software for a special vending machine device which organizes electronic component bags
 - Wrote code for Node.js webserver to run MongoDB on
 - Built function to retrieve detailed part information from a barcode

Autonomous Suitcase — *PennApps XIV*

 - Led software development in Python to interface robot with ROS by integrating packages for Kinect and tracking algorithms
 - Managed electronics and power distribution system

3D Scanner — *PennApps XIII*

 - Wrote Python code for motor encoders with ROS
 - This was a **top 10 hack** and won the **best use of rapid prototyping award**

163 Mobile Card Game — Android application

 - Created an original math based single player card game
 - Implemented linked lists for card queuing feature with a binary tree implementation with custom Card Node classes to store card data
 - Worked with Shared Preferences to keep high scores locally

Electric Longboard — *Personal Project*

 - Designing and building from scratch fully electric-powered longboard
 - Controlled by Wii Nunchuck via an Arduino to spin a 192kv brushless outrunner with an FVT 120A ESC, all powered by 2 5000mAh 3S 40C LiPo batteries with a custom BMS

EDUCATION

UC Berkeley
Computer Science, B.A.

Class of 2019

SKILLS

Confident with Java, Python, Android development, Android testing, Git, Guice & Dagger, Linux/Unix, HTML/CSS/Javascript, Jekyll, CAD software, prototyping and fabrication, Adobe Creative Suite, Bash + Tmux

Familiar with ROS, C, C++, Node.js, Protobufs

EXTRACURRICULAR ACTIVITIES/AWARDS

UC Berkeley Men's Ultimate Team Brand Manager

Devpost Campus Ambassador for UC Berkeley

Top 10 Hack at PennApps XIII

Best Use of Rapid Prototyping at PennApps XIII

#4 out of 400 for CS61C Optimization Project

ARRL HAM Radio License Technician Class (KK6BLD)

UC Berkeley, IEEE General Member

Eagle Scout of BSA Troop 453

Triple Crown of National High Adventure