Jeffrey Hsieh
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Education: *University of California, Riverside*
Expected Graduation: June 2017 | Computer Science
GPA: 3.51

Skills

- **Programming Languages:** C, C++, Python, HTML, CSS, Assembly.
- **Programming Tools:** Linux (BASH), Cloud9, emacs, Vim, Eclipse (Helios), LaTex, GitHub, BitBucket, Atmel.
- **Hardware Environment**: Arduino, Mbed, Xilinx, Teensy.
- **Other:** Soldering Techniques.
- **Languages:** English and Mandarin (fluent in both composition and speech).

Projects/Experiences

Maze Solving Robot: Micromouse (November 2014 - April 2015)

- An autonomous robot that aims to solve maze; the robot is programmed to acquire information via phototransistors and perform a deterministic search with shortest path algorithms.

City Map Generator (June 2015 - September 2015)

- Coded in C++; a mapping software that stores data in a tree structure using greedy algorithms such as modified Dijkstra's algorithm. The results are displayed on dotty, which is under linux environment.

University Project (UCR): 16-bits Security System (November 2015 - January 2016)

- A high level state machine that operates on 16-bits using shift registers. The operating inputs provides over 10,000 passcode options on a BASYS2 Board.

Embedded Systems: Autonomous Robot Mapper (January 2016 - March 2016)

- An enhanced robot from micromouse, this robot maps its surrounding and utilizes USART technique to transmit essential data from afar much like a drone.

IAS Research Team Lead Engineer (September 2015 - present)
Solar Thermal Closet Project - Riverside, CA (Dr. Tam)

- Lead engineer of an energy conservation research team; guides the team by designing and approving the main embedded system. In addition, the system is programmed in C/C++, which regulates the energy usage from solar to home devices.

Awards/presentations

- CitrusMedic Project, Citrus Hack UCR, Feb 20, 2015
- UC Micromouse Competition 3rd Place, UCR, April 20, 2015
- Team IAS Chemical/Environmental Award, EAP, June, 2016