

Education:

University of California, Riverside

Expected Graduation: June 2017 | Computer Science

GPA: 3.38

High School Diploma

Eleanor Roosevelt High School

August 2009 - June 2013

Technical Skills

Language: English, Mandarin, Taiwanese (fluent in both composition and speech).

Programming Language: C, C++, Python, Bash, Assembly.

Programming Environment: Linux, Cloud9, Vim, emacs, Eclipse (Helios), LaTeX, GitHub, BitBucket.

Hardware Development: Arduino, Mbed, Xilinx, Teensy, Atmel, Soldering Techniques.

Designing: PaintTool SAI.

Projects/Experiences

Research: Lead Computer Engineer

September 2015 - Present

Dr. Kawai Tam, Riverside CA

Leading the research team as the head computer engineer of the Integrated Appliance System (IAS) project. The objective is to design a smart home system with clean solar energy, which provides households with essential resources such as water, air conditioning, and dryers at low cost. This system is programmed in C/C++, with optimizations on home device controls via custom microcontrollers and innovative state machines.

Web Development - Hi I'm Jeffrey!

June 2016 - Present

Github, <https://jhsie007.github.io>

Personal website developed in HTML, CSS, Java/Javascript, with inclusions of individual photography resources. Designing my own animations, layout, and css styling, which primarily showcases my project logs, social medias, particular interests, and personal art/designs.

Robotics: Micromouse

November 2014 - April

2016

IEEE, Riverside CA

Model and program a miniature robot to perform searching tasks relative to maze problems. Utilizing phototransistors to retrieve essential information about the environment and solving a path with modified shortest path algorithms. In addition, individual calibrations ensures the precision of analyzation and mobility of my mouse, hence allowing the mouse to deduce a maze with deterministic decisions.

Embedded Systems: Geographic Mapping

January 2016 - March

2016

University of California, Riverside CA

Enhancing the functionality my previous robot by adding USART techniques like a modern drone technology. The robot communicates with an external device from long-range, which permits the external device (laptop) to manipulate the data while drawing/visualizing the robot's vision into a real map.

Awards/Presentations

UC Micromouse Competition 3rd Place, UCR

November 2014 - April 2016

Team IAS Chemical/Environmental Award, EAP

May 2014 - June 2016

CitrusMedic Concept, Citrus Hack UCR

February 2015