# **JIUNN SIOW**

# **EDUCATION**

University of California Riverside

2015-2019, Third Year, Bachelor of Science, Electrical Engineering

# **EMPLOYMENT**

#### Systems Optimization and Computer Architecture Lab

Research Assistant

Riverside Oct 2017 to Current

• Currently working under Professor Daniel Wong.

- Coding a tool to test the benchmarks of a NVIDIA Graphical Processing Unit in CUDA C.
- Also will create a cooling system for the board using CAD software.

#### General Atomics Aeronautical

Avionics Software intern

Greater San Diego Area Jun 2017 to Aug 2017

- Wrote a program in C that updates the software of the main flight board of all General Atomics aircraft.
- Worked on test code that also tests all the hardware that is connected to the main flight computer of a General Atomics aircraft. Used Xilinx tools and C.
- Worked on creating CAN protocol that works between different modules on one of the small unmanned aerial aircraft.

# **PROJECTS**

Robot See Robot Do.

Apr 2017 to Apr 2017

- Connected a humanoid robot to Microsoft's Kinect.
- Used C++, Microsoft's Kinect API, and serial communication.

#### Smart Mirror

Jan 2017 to Jan 2017

- A smart mirror with security and home automation features allows you to control smart objects around your home .
- Worked on building the Hardware component of the whole project through circuit design on arduino and 3D design.
- Worked on mounting the camera and building the house component

#### IOT greenhouse

Jan 2017 to Jan 2017

- $\bullet$  Created an IOT greenhouse that uses an Raspberry Pi and Arduino that has an Web UI.
- Utilized IBM's Node Red API and Nodejs to do the Backend of the project.
- Utilized HTML, CSSS , and IBM's Node Red API .
- Used 3D printing and circuit design to construct the hardware of the greenhouse.

#### First Person View BattleBots

Oct 2016 to Oct 2016

- Created a Virtual Reality Battle Bots by using toy monster trucks with sensors and camera .
- worked with Open WRT to get streaming on camera to the phone on google cardboard.
- used CSS and HTML to create front end of stream.
- used 3D printing and circuit design to design the Battlebots.

#### LED Cube

Apr 2016 to Apr 2016

- This hardware project linked IBM's IOT API with an an LED cube that would try to display things like weather and time.
- Worked with the leap motion and Arduino.
- Coded in JavaScript , Node, and C.

#### LED Matrix

Apr 2016 to Apr 2016

- Used a Gyroscope to project 3D movement onto an 2D LED matrix.
- Used an Arduino and C code to do this.

### **SKILLS**

SOFTWARE: AutoCad, Autodesk Inventor, Fusion 360

PROGRAMMING: HTML, Javascript, Python, C++, CSS, C

HARDWARE: 3D Printing, Arduino, Raspberry Pi, Internet of Things

FRAMEWORKS: Johnny-Five.js, Socket-IO, NodeJS

# **AWARDS**

LA Hacks · Top 20	Apr 2017
SB Hacks · 4th place	Jan 2017
Hack @ UCI 2017 · Best Internet of Things Award	Jan 2017
Citrus Hacks 2016 $\cdot$ 2nd Place and Equipo Vision most Innovative Award	Oct 2016
SB Hacks II · IBM Watson Internet of things Award	Apr 2016
Beach Hacks 2016 · 1st Place	Apr 2016