## CHANG CHU-MING

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1526 Arch Street, Berkeley, CA 94708

## **EDUCATION DETAILS**

## University of California, Berkeley

August 2017 - May 2018

- Master of Engineering degree in Electrical Engineering and Computer Science (Visual Computing & Computer Graphics)
  - Coursework: Theory and Applications of Virtual Reality and Immersive Computing, Machine Learning
  - **Capstone project: Augmented Reality and Virtual Reality**

## **National University of Singapore**

August 2014 - June 2017

- Bachelor of Engineering degree in Electrical Engineering, First-Class Honors (GPA: 3.8)
  - Coursework: Data Structures and Algorithms Accelerated, Programming Methodology, Programming for Computer Interfaces, Introduction to Artificial Intelligence
  - Thesis: Discovering Autism Spectrum Disorder (ASD) subtypes by machine learning of MRI data

#### External Coursework

Concurrent Programming and Operating Systems, Introduction to Computer Vision

## **EMPLOYMENT**

## **Huawei Technologies**

## Research Intern, SHIELD Lab

June - September 2016

- Conducted research on 5G LTE vehicle-to-everything (V2X) communications
- Effectively analysed and summarised existing standards, including IEEE 1609.2, and provided security recommendations for new standards proposed
- Contributed to one of Huawei's patents on 5G vehicular network

## Razer (Asia Pacific) Pte Ltd

## Software Engineer, part-time, Quality Assurance

February - April 2014

- Streamlined process of testing new products by creating an online inventory system for employees to log item transactions
- Improved efficiency of product testing by implementing an automated testing framework

#### K-Link Technologies Intern

November - December 2008

- Intern at K-Link Technologies in Tsingchu, Taiwan
- Implemented user interface to control camera movements for a video surveillance program

## INDEPENDENT TECHNICAL PROJECTS

### **Projects**

- Subtle Safety (2017 present) Reliably predict drivers' fatigue level by combining machine vision and steering wheel analysis
- eyeSky (2015) Quadcopter which reconstructs 3D models of objects or buildings
- 3Dify (2015) Web app which reconstructs 3D models based on 2D images uploaded by users
- Scheduleit! (2014) Scheduling web app
- Just Another Tower Defense (2012) Cross-platform tower defence game

# ADDITIONAL EXPERIENCE AND AWARDS

## **National University of Singapore**

- Top Student in Electrical Engineering (AY2014/2015) (ST Engineering Award)
- Deans List (AY2015/2016 Semester 1)
- Coreteam on NUS Hackers Organized hackathons and hacking-related events, managed relations with industry sponsors
- Global Engineering Programme & Scholarship

## SKILLS, LANGUAGES AND TECHNOLOGY

## Languages

Fluent in both English and Chinese (Spoken and written)

## Software

- C
- C++Java
- **Javascript**
- HTML
- Python

## **Technologies**

- Unity
- Eclipse & Android Studio
- Node.js & Redis
- OpenCV
- Matlab
- **Amazon Web Services**

- Arduino / ESP8266
- Raspberry Pi / Banana Pi
- oDroid

## **Hardware**

- VHDL / Verilog
- ARM architecture