CHANG CHU-MING

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EDUCATION DETAILS

University of California, Berkeley   **August 2017 – May 2018**
- Master of Engineering, Electrical Engineering and Computer Science (Computer Vision)
  - Coursework: Machine Learning, Computer Vision, Computer Graphics, Deep Neural Networks, Virtual Reality and Immersive Computing
  - **Capstone project: Stereo-camera estimation of head-related transfer functions for 3D audio**

National University of Singapore   **August 2014 – June 2017**
- Bachelor of Engineering, Electrical Engineering, First-Class Honors (GPA: 3.8)
  - Coursework: Data Structures and Algorithms, Artificial Intelligence, Programming Methodology, Programming for Computer Interfaces
  - **Thesis: Machine learning of MRI data for discovering Autism Spectrum Disorder (ASD) subtypes**

External Coursework
- Concurrent Programming and Operating Systems

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
- IEEE-HKN member

SKILLS, LANGUAGES AND TECHNOLOGY

Languages
- Fluent in both English and Chinese (Spoken and written)

Software	**Technologies**	**Prototyping**	**Hardware**
C	Unity	Arduino / ESP8266	VHDL / Verilog
C++	Eclipse & Android Studio	Raspberry Pi / Banana Pi	ARM architecture
Java	Node.js & Redis	oDroid	
Javascript	OpenCV	3D printing	
HTML	Matlab	Sensors and actuators	
Python	Amazon Web Services		