

## Shang-Yen Su (Louis)

+886-932-227-205 | [su830304@gmail.com](mailto:su830304@gmail.com)

Number 240-6, Section 2, Dong-Da Road, Hsinchu City, Taiwan

LinkedIn: [Su, Shang-Yen](#)

### EDUCATION

---

#### The Chinese University of Hong Kong (CUHK)

Shatin, Hong Kong

##### *Bachelor of Engineering in Electronic Engineering*

2016

- Undergraduate Thesis Advisor: [Dr. K. N. Kgan](#)  
Thesis Title: “Real-time Augmented Reality Application of 3D Head Tracking”
- Scholarship: Yu Panglin Scholarship (\$6,500USD) from Yupengnian Charity Foundation

### RELEVANT COURSEWORK & PROJECT

---

- Course: Video Coding Technology; Advisor: [Dr. K. N. Kgan](#); Tool: Matlab  
“Hybrid Video Coding with Intra Prediction & Motion Estimation”
- Course: Digital Signal Processing & Applications; Advisor: [Dr. T. Lee](#); Tool: Matlab  
“FIR Filter Design for Noisy Speech”
- Course: Embedded Systems; Advisor: [Dr. K. N. Leung](#); Tool: Keil C  
“Stopwatch Design with MCU8051”
- Course: Analog IC; Advisor: [Dr. K. N. Leung](#); Tool: LTSpice  
“Different-Input Signal-Ended Op-Amp Design”
- Course: Engineering Design; Advisor: [Dr. X. Wang](#); Tool: SolidWorks, Verilog  
“Solar-power Smart Car Project”

### RESEARCH & WORK EXPERIENCE

---

#### ModuoVR

Beijing, China

##### *Engineering Intern (R&D Division)*

Jul 2016—Present

- Developing the application that can record full-screen panorama images in 0.3 sec. in VR machine and share photos on WeChat to increase the market visibility of VR products in social networks
- Researching the communication protocol of HTC Vive controllers with GNU Radio to learn the specific wireless communication technique of HTC Vive
- Designed the fencing virtual reality game, which users can play fencing with Online player on Steam, with Unreal Engine 4

#### Image & Video Processing Lab

Shatin, Hong Kong

##### *Student ([final-year project](#))*

Aug 2015—May 2016

- Developed the prototype of Online Fitting Room by combining the head-tracking algorithm and 3D model control technique
- Used OpenCV to program for image recognition; used OpenGL to program the 3D model control
- Planning to commercialize the app and collaborate with online retailers

#### Macronix Microelectronics (Suzhou) Co., Ltd

Suzhou, China

##### *Engineering Intern (R&D Division)*

May 2015—Jul 2015

- Used C language in Linux to develop the software that can automatically analyze IC data for tape-out
- Participated in IC design and manufacturing
- Learned the process of IC design and the application of data analysis

## COMPETITION

---

### International Genetically-Engineered Machine Competition (iGEM)

Shatin, Hong Kong

*Modeling Group Leader/Sponsoring Group Leader*

Oct 2013

- Won the Silver Medal in Asia Jamboree
- Designed the voltage switch to control the enzymatic reactions of bacteria
- Utilized COMSOL to do the modeling work to simulate the flow and diffuse the fluid and reactants around enzymes
- Tried to design the electric power-generated device by transferring the energy from decomposing PAH
- Presented the team's proposal to a dozen companies in HK and TW; successfully fundraised \$8,500USD

## PROFESSIONAL DEVELOPMENT

---

### Electronic Industrial Training

Shatin, Hong Kong

*Member*

May 2015

- Learned PHP and Javascript to develop websites
- Designed the Radio box with SolidWorks
- Used CircuitCAM and PowerPCB to design a radio

### Harvard Project for Asian & International Relations (HPAIR)

Tokyo, Japan

*Delegate (the Energy & Environment Panel)*

Aug 2014

- Conducted the case study to provide possible solutions for the water-power plant's pollution issue on Mekong River
- Participated in the Technology Panel to learn and discuss future technological innovation

## LEADERSHIP & EXTRACURRICULAR ACTIVITY

---

### University Softball Team, CUHK

Shatin, Hong Kong

*Vice Captain & Second Baseman*

Sep 2014—May 2016

- Led the team to win the Silver Medal in Hong Kong's Men's Softball League in 2016
- Developed the training agenda; managed the team's training schedule

### Asia-Pacific Children's Convention (APCC)

Fukuoka, Japan

*The Peace Ambassador of Taiwan*

Jul 2012

- Communicated with other peace ambassadors from 31 countries for cultural exchange
- Discussed global energy-related issues

## SKILL

---

**Programming:** C/C++, OpenGL, OpenCV, Matlab, Unreal Engine, GNU Radio, LTSpice, PSpice, Keil C, Verilog, CircuitCAM, PowerPCB, SolidWorks

**Language:** Mandarin Chinese (native); English (fluent); Cantonese (fluent); Taiwanese (fluent); Spanish (basic)