

Michael Yung-Shan Su

No.2, Aly. 5, Ln. 320, Dongming Rd., Dali Dist., Taichung City 412, Taiwan (R.O.C.)
(+886) 980-402-281 | michael1994822@gmail.com

EDUCATION

National Chiao Tung University (NCTU)

M.S. in Institute of Electrical Control Engineering

Hsinchu, Taiwan

Sep. 2017 ~

National Tsing Hua University (NTHU)

B.S. in Electrical Engineering

Hsinchu, Taiwan

Sep. 2013 - Jun. 2017

RESEARCH EXPERIENCE

Picking and placing system using texts on objects

Sep. 2016 ~

Advisor: Prof. Hsueh-Cheng Wang

- Proposed a system to execute automatic product-placing tasks.
- Designed AGV shipping car equipped with Realsense SR300 and Realsense R200 to achieve localization and brand name prediction.
- Analyzed brand names on the ARC products and collected brand name training datas; developed algorithms for calculating grapping pose from brand name mask.
- Consolidated a 4-people team to establish FCN brand name prediction, product pose estimation, and Moveit motion planning.

Guiding robot with obstacle-avoiding haptic device

Oct. 2016 ~

Advisor: Prof. Hsueh-Cheng Wang

- Designed a guiding robot to solve the shortage of guide dog.
- Upgraded the hardware and system from TX-1 and Pi 2 to TX-2 and Pi 3; integrated Lidar and Pi cameras on TX-2 and Pi 3 embedded vision system; designed wearable haptic device and integrated with guiding robot.
- Developed an indoor wall following system based on Duckietown by PCL.
- Organized a 4-people team to build a wearable obstacle-avoiding haptic-bracelet with multi-sensors on the guiding robot which can follow the blue-yellow lanes or walls.

Big data analytics on point cloud - Road detection

Aug. 2015 – Jun. 2016

Advisor: Prof. Min Sun

- Analyzed KITTI dataset and established a road detection algorithm.
- Completed road detection system that can find road range of scenarios from KITTI dataset.

WORKING EXPERIENCE

NCTU Teaching Assistant

Hsinchu, Taiwan

Creative Software Project

Sep. 2017 – Jan. 2018

Human-Centric Computing

Feb. 2018 – Jun. 2018

WeSchool research and development department, Intern

Hsinchu, Taiwan

Launched the first Hsinchu Mini Maker Faire with 1,500 participants

Apr. 2015 – Oct. 2015

Designed Maker courses for 72 elementary and junior high school students

Jun. 2016 – Feb. 2017

EXTRACURRICULAR ACTIVITIES

2017 HackTKU 1st price

Taipei, Taiwan

- Built a relieving chat-bot by using line-bot API and integrating deep learning method.

SKILLS & INTERESTS

Programing Skills: C, C++, Matlab, Python, ROS

3D sensors: Realsense SR300, Asus Xtion PRO, Structure Sensor

Embedded board: NVIDIA Jetson TX2, Raspberry Pi 3, ODROID-XU4