

Education

University of California San Diego (UCSD) – Jacobs School of Engineering

La Jolla, CA, USA

M.S. IN ELECTRICAL AND COMPUTER ENGINEERING

Exp. Jun. 2020

- Average GPA: 3.79/4.0
- TA: ECE276A (Sensing and Estimation for robotics), ECE253 (Digital Image Processing)

National Taiwan University (NTU)

Taipei, Taiwan

B.S. IN ELECTRICAL ENGINEERING

Sep. 2013 - Jan. 2018

- Average GPA: 4.14/4.3
- TA: Calculus

Skills

Programming

Python – pytorch/ Keras/ Tensorflow, C++, Matlab, Robot Operating System (ROS), JavaScript (back-end), Arduino

Internships

Research Intern, Autodesk research

San Francisco, CA, USA

PROJECT: FLOORPLAN RECONSTRUCTION

Jun. 2019 - Sep. 2019

- Researched deep learning module to reconstruct elements from images, extracting information from architecture designs
- Developed Revit python API to export floorplan images and labels for training, reconstructing walls for floorplans with different styles

Research Intern, AI Center at Inventec Corp.

Taipei, Taiwan

PROJECT: INDOOR NAVIGATION

Jul. 2018 - Sep. 2018

- Developed robotic control system under ROS framework, successfully achieving cloud training and evaluation
- Trained and tested models using CNN deep reinforcement learning in Tensorflow, reaching success under virtual environment

Software Development Intern, Dell Technology

Taipei, Taiwan

PROJECT: TOOL DEVELOPMENT

Jul. 2016 - Aug. 2016

- Designed the architecture of software tools, to speed up debugging process for server development
- Created debugging tools from back-end algorithm to front-end interface in python, in use for over 1 year

Research & Projects

Research Assistant, Visual Computing in UCSD (Prof. Manmohan Chandraker, Prof. Hao Su)

La Jolla, CA, USA

PROJECT: DEEP STRUCTURE FROM MOTION (SFM)

Oct. 2018 - Current

- Implemented deep learning networks for feature detection or description in SFM pipeline, optimizing using self-supervised method
- Developed 'Superpoint' in pytorch in combination of deep fundamental matrix estimation, evaluating on kitti dataset

Project Manager, Software Engineering - Ubiquitous Computing

La Jolla, CA, USA

TOPIC: DREAMBOOK - A PHYSICAL E-BOOK

Sep. 2018 - Jan. 2019

- Innovated ideas using low-fidelity to high-fidelity prototyping, demoing our final product "DreamBook" to the CSE department
- Managed the team of 5 using scrum framework, accomplishing the hardware design in R-pi3 and software design in python

Team leader, HackNTU Hardware Hackathon Competition

Taipei, Taiwan

PROJECT: CAR SAFETY SYSTEM

Mar. 2017

- Invented system to reduce casualties in accidents within 24 hours, winning Enterprise Award from FET & Gatec
- Created prototype of safe car using wood, Arduino, and Linkit, exhibiting 3 features in demo

Publications

[1] Anonymous. Deep Keypoint-based Camera Pose Estimation with Geometric Constraints. In Submitted to Computer Vision and Pattern Recognition, 2020. Under review.

Leadership

President of Aboriginal Service Club, NTU (Prof. Chien-Mo Li)

Taipei, Taiwan

LEADER OF PUBLIC RELATIONS/ VICE PRESIDENT/ PRESIDENT

Sep. 2014 - Jul. 2017

- Arranged winter/summer camps in aboriginal villages in remote mountains of Taiwan, exposing primary school students to science
- Organized volunteer training with 60 teammates as club president for 6 months, operating 14 day services
- Initiated effective communication and creative thinking between teammates, shaping positive environment in the club

Honors & Awards

2017 Certificate of Altruistic Award, NTU
 2016 Scholarship (USD\$5,000), Lin, Hsiung-Chen Foundation

Taipei, Taiwan

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