Yi-Kang Tung Fang

Electrical and Computer Engineering
University of Washington, Seattle

tungfang@uw.edu
+1 (530) 601-3605
www.linkedin.com/in/tungfang

EXPERIENCE

UW ECOCAR

Connected and Autonomous Vehicle Team Member
Sep. 2019 - Present

- Developed concepts of Computer Vision using OpenCV and Python for driver assistance in lane following.
- Built a lane detection model by implementing a lightweight, power efficient CNN architecture ESPNet.

UW INFORMATION PROCESSING LAB

Undergraduate Researcher
Mar. 2018 – Present

- Winner of 2019 CVPR AI City Challenge. Improved city scaled multi-camera vehicle tracking by designing and training Deep Neural Network with 150k traffic scene images and videos for object detection. The result achieved 70.59% IDF1 score. (Python, OpenCV)
- Helped design and develop a program to obtain street cameras' GPS coordinates in order to estimate vehicle's speed, traveling time between cameras with over 90% precision.

HAITEC AUTOMOBILE

Software Engineer Intern
Jun. 2018 – Aug. 2018

- Collision Avoidance System Group.
- Designed and tested the ADAS controller to alert the driver of an imminent collision in its forward path. (Embedded C)
- Developed the Electronic Stability Control model according to the ADAS function requirements and implemented it on Luxgen U7 prototype.

PROJECTS

Doctor at Your Fingertips

Mar. 2019

- Designed and led the medical monitoring system project that support routine basic measurements of bodily functions for people with chronic medical problems. (Arduino, C++, Microcontroller)

CogniCue Blindness Assistant

Jan. 2020

- Built a headset to identify known faces and interpret facial cues information with haptic engines to visually impaired patients by using Computer Vision.

EDUCATION

Bachelor of Electrical and Computer Engineering

Jun. 2020

- Embedded Computing System Specialization

Master of Electrical and Computer Engineering

Jun. 2021

- Data Science/Computer Vision Specialization

COURSES

- Data Structures • Algorithms • Artificial Intelligence • Embedded System • Systems Programming
- Computer Architecture • Digital Circuits & Systems • Probability & Statistics • Linear Algebra

SKILLS

- Java • Python • C • C++ • OpenCV • Linux • Verilog • SystemVerilog