Eva Mo

evamo.tw1@gmail.com (412) 636-4667 linkedin.com/in/szuyumo

Experience

NVIDIA Corporation Redmond, WA
Senior Computer Vision Engineer **(Auto-labeling team)** Jun 2023-Apr 2026

- Developed a **4D multi-object tracking** autolabeling pipeline for autonomous vehicles (AV) by integrating perception results from **LiDAR** or **camera**, experienced in **production-level** ML model evaluation and release/deployment.
- Constructed the cuboid data ingestion pipeline with knowledge of sensor fusion and motion compensation for LiDAR.
- Built multiple visualization tools for overlaying cuboids on LiDAR/camera and Redash dashboards for KPI tracking.
- PIC for pipeline bring-up on a new sensor suite.

Computer Vision Engineer **(mapping team)** Jul 2021-Jun 2023

- Optimized the in-car real-time mapping software by reducing 31% of **memory bandwidth** without losing useful information downstream and still meeting product requirements.
- Implemented the lane graph generation for an offline AV HD mapping system with complex BFS & DFS algorithms.
- Contributed to system design, software optimization, and testing to improve mapping accuracy and efficiency.

Computer Vision Intern **(mapping team)** May-Aug 2020

- Designed and implemented the wait-line detection pipeline for NVIDIA's in-car mapping system.

AutoValet - Capstone Project at Carnegie Mellon University Sep 2019-May 2021

- Designed a platform-independent autonomous parking system that searches for and occupies parking spots in unexplored indoor garages without any prior maps or custom infrastructure.
- **Full-stack robotics** experience from sensor suite bring-up (LiDAR & RGB-D camera), **Gazebo simulation**, to integrating **perception**, **localization**, **mapping**, and planning stack altogether into a ready-to-use system.
- Contributed heavily to setting up the **ROS** ecosystem, lane detection, and **SLAM** algorithm.

Cardinal Blue Software Taipei, Taiwan
Machine Learning Intern Feb-Jun 2019

- Deployed a semantic segmentation model (MobileNetV2) for background removal in the PicCollage mobile app.
- Achieved 83% IoU with a <10MB model size, improving accuracy by 6% over the existing production model.

Coretronic Corporation Hsinchu, Taiwan
Computer Vision Intern Jul-Aug 2018

- Built a monocular visual odometry system using ORB feature extraction and pose optimization (G2O, C++).

Education

Carnegie Mellon University (CMU), School of Computer Science Pittsburgh, PA
Master of Science in Robotics System Development Sep 2019-May 2021
QPA: 4.08/4.33
Selected Coursework: Robot Localization & Mapping, Robot Autonomy, Computer Vision, Robot Mobility

National Taiwan University (NTU) Taipei, Taiwan
Bachelor of Science in Electrical Engineering Sep 2015-Jun 2019
GPA: 4.0/4.3
Selected Coursework: Robotics, Machine Learning, Operating System, Algorithm, Automatic Control

Skills

Programming Languages: Python, C/C++, ROS, SQL
Tools: OpenCV, Pytorch, Bazel, Docker
Computing Environments: Linux, Windows, MacOS

Projects

Visual Search with Semantic Segmentation on ORB SLAM NTU, Sep 2018-Jun 2019

- Integrated ORB-SLAM with semantic segmentation to create a real-time 3D semantic point cloud.
- Designed an algorithm to localize target objects in 3D maps efficiently.

Real-time 3D Reconstruction with Visual SLAM NTU, Jan-Jun 2018

- Implemented RTAB-Map in ROS with ZED stereo camera & Kinect2 RGB-D sensor to build real-time 3D maps.