Tempe, AZ 85281 | (909) 278-2644 | s963310@gmail.com

WEI WANG

PROFESSIONAL SUMMARY

Machine Learning and data assistant skilled in Traffic data analysis with nearly 2 years of experience creating machine learning models and retraining systems and transforming data science prototypes to production-grade solutions.

Helping with the research group to collect and organize the traffic vehicle data based on making map segmentation and Fine-Grained Traffic Counting. Consistently optimizes and improves real-time recommendation systems by evaluating strategies and testing changes in Mask RCNN Python.

SKILLS

- Programming Languages: Python, Matlab, C++
- Machine Learning
- Big Data mining and analysis
- Autocad and Solidwork2014

PROFESSIONAL EXPERIENCE

RESEARCH ASSISTANT II 05/2021 to Current
Arizona State Active Perception Group, Tempe, Arizona

- We develop a system for **automated traffic incident detection**, and **driver behavior analysis**, using traffic monitoring videos to address road safety assessment which is often studied using safety-critical events that do not happen frequently.
- We developed novel algorithms for rule-based traffic event detection and driving safety metrics calculation. I also collected 30 hours of videos with camera on a tripod at 20 sites.
- Validated incoming data to check information accuracy and integrity while independently locating and correcting concerns.

RESEARCH ASSISTANT I 10/2020 to 04/2021
Arizona State Active Perception Group, Tempe, Arizona

- Traffic Analysis with drone video
- My main contribution of this project is being current system and methods of traffic analysis with drone videos using advanced computer vision algorithms and neural network models.
- I build a system that can count the traffic in fine-grained lane level using drone videos in four different types of traffic sites.
- Identified, analyzed and interpreted trends or patterns in complex data sets by finding correlations and visualizing with charts.

AUTOMATIC CONTROL 06/2018 to 09/2018
Beijing University of Aeronautics and Astronautics, BUAA, Beijiang, China

- I'm a one of student of overseas internship, participating professional courses training and visit the laboratory of Aerodynamics based on Mechanical automatic control with Matlab

system. We also cooperate in the experiment of dynamics mechanics and research on the use of robotic arms in automatic vehicle assembly with local students.
• Developed and implemented cost-effective strategies for updating existing applications.

ASSISTANT OF ENGINEER 03/2018 to 06/2018
DigiBest Technology Co., Ltd, Taipei, Taiwan

• My job is assistant of Engineering Department, included field testing digital terrestrial TV in some areas, soldering the resistors on the TV boards by soldering iron tool.
• Help company engineers to research IC drivers, create bridges to APPs, and control boards and TV boards for hardware in sports equipment.

ASSISTANT OF THE SALES 04/2017 to 08/2017
Lengin International Co., Ltd, Taipei, Taiwan

• Used consultative sales approach to understand customer needs and recommend relevant offerings.
• I leanrn about "Search Engine Optimization",which is the process of affecting the online visibility of a website to help a company have a better rank. I am also responsible for exhibit promotion planning and slogan design of the company.

EDUCATION

Arizona State University, Tempe, AZ, USA
Bachelor of Science Engineering, Electrical Engineering, Expected in 12/2022

Beihang University, Beijiang, China
Summer On-Campus Research Intership, Mechanical Automatic Control, 08/2018
• Honoree of Beihang University Certificate of Internship Award

Taipei Municipal Yu Cheng Senior High School, Taipei, Taiwan
High School Diploma, 06/2017