

LUOHAO XU

+44 (0)7536247382 | xuluohao@outlook.com

[LinkedIn](#) | [Github](#)

EDUCATION

Imperial College London

Oct 2022 - Oct 2023

MSc Environmental Data Science and Machine Learning

University of Glasgow & University of Electronic Science and Technology of China

Sep 2018 - Jun 2022

BEng Electronic and Electrical Engineering with Information Engineering

GPA: 3.77/4.0

Degree Class: with Honours of the First Class (1:1)

PROFESSIONAL EXPERIENCE

Chengdu Dianzhen Technology Co.Ltd.

Jul - Sep 2021

Software Developer Intern Chengdu, China

Chengdu, China

- Design a deep learning model for modulation recognition of communication signals
- Apply Resnet model and train it on dataset containing 24 different kinds of modulation signals with label and IQ channels
- The overall precision is 85.22% with half kinds of modulation over 90%

RELEVANT PROJECTS

Video Face Tracking Model based on Deep Learning

Oct 2021 - Apr 2022

(Independent Research Project)

- WIDERFace and CrowdHuman face data sets were used to train YOLOv5 to get a face detection model with detection mean Average Precision of 79%
- DeepSORT based on Kalman filter and Hungarian algorithm was used as the tracker
- Combined with YOLOv5 face detection model and DeepSORT tracker, face Track-by-Detection model was used in the video

Smart Rover

Mar - Jul 2021

(Group Project)

- Used i.MX RT1064 as microcontroller for the embedded system design to control motor drivers, sensors, machine vision module
- Applied the machine vision module OpenCV with special image processing algorithm for route tracking and color recognition
- Installed 5 ultrasonic sensors, a gyroscope and accelerometer module on the rover to realize the functions of automatic obstacle avoidance and precise steering

EXTRACURRICULAR

Online Learning

Oct 2022 - Feb 2023

- Completed e-learning courses including Data Structures sp21 (Berkeley)

Video Editing

Feb 2020 - May 2020

- Create a movie tribute video with over 200k views on YouTube ([Link](#))

TECHNICAL SKILLS

- Preferred programming languages: Python, Java and C++