Yang Mu

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Education

ETH Zurich, Geomatic Engineering, *M.Sc.(Exchange Program)* Sep. 2021 - Jun. 2022

Main Courses: Computer Vision, Image Interpretation, Basics and Principles of Radar Remote Sensing, etc

KTH Royal Institute of Technology, Geoinformation, *M.Sc.* Aug. 2020 - Jun. 2022

GPA: 4.9 / 5 (Top 5%); Main Courses: Machine learning, Deep Learning in Data Science, Spatial Databases, Geovisualisation, Spatial Analysis, etc

Wuhan University, Remote Sensing Science and Technology, *B.Eng.* Sep. 2016 - Jun. 2020

GPA: 3.5 / 4 (Top 30%); Main Courses: Principle and Application of Remote Sensing, Data Structure, Digital Image Processing, Digital Photogrammetry, Object-Oriented Programming and Design, etc

Project Experience

KTH-GEO Wildfire Monitor
(https://omegazhangpzh.users.earthengine.app/view/wildfire-monitor-v7) Aug. - Sep. 2021

- Developed a python program to automatically download Sentinel 1/2 data
- Developed automatic algorithms to process Sentinel-2 Optical (Resample, Subset, etc) and Sentinel-1 GRD/SLC SAR (Interferogram, Deburst, Phaseremoval, Filtering, etc) data based on Snappy library
- Developed a python program automatically upload processed data into Google Earth Engine as asset

Research on the land use of Wuhan city based on Deep Learning Feb. – May. 2020

This research is to use different deep learning models to classify remote sensing images of Wuhan at the pixel level into 11 classes, and to analyze the landscape pattern based on the results.

- Conducted the training of AlexNet, VGG11, ResNet-50 and ResNet-101 (90.48% accuracy)
- Applied Fragstats 4.2 to analyze the landuse in Wuhan

China UAV Intelligent Perception Competition (3rd/38; Team Leader) Mar. - Oct. 2018

According to the competition scene, we designed the drone and developed the corresponding algorithms to realize the target detection, drone navigation and tracking, and completed the task-oriented autonomous flight.

- Constructed and trained the YOLOv2 model for target detection
- Developed drone control and tracking algorithms

Intern Experience

Stockholm Environment Institute, Research Assistant Jun. – Jul. 2021

- Constructed and trained LSTM model to predict the NOx concentration in Stockholm in the next three days
- Compared with the results using Prophet, SVM, KNN, DecisionTree, XGBoost and ARIMA models

Honors And Awards

Erasmus Scholarship - European Commission, Europe Sep. 2021
KTH Scholarship (35/1700) - KTH Royal Institute of Technology, Sweden Mar. 2020
Excellence Scholarship for the 2018-2019 academic year - Wuhan University, China Oct. 2019
Second Award - Asia and Pacific Mathematical Contest in Modeling, China Feb. 2019
Outstanding Paper - High Resolution Earth Observation Conference, China Oct. 2018
Excellence Scholarship for the 2017-2018 academic year - Wuhan University, China Oct. 2018
3rd Place - UAV Intelligent Perception Competition, China Aug. 2018
Second Award - Mathematical Contest in Modeling (MCM), USA Mar. 2018