

Chen Qian

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EDUCATION

University of Virginia, Charlottesville, VA

Aug 2019 – Expected Jan 2021

Master of Engineering in Systems and Information Engineering

GPA: 3.60/4.00

- Coursework: Design and Analysis of Algorithms, Data Mining, Machine Learning, Decision Analysis

China University of Geosciences, Wuhan, China

Sep 2015 – Jun 2019

Bachelor of Engineering in Remote Sensing Science and Technology

GPA: 3.54/4.00

RESEARCH

Delineating Mixed Urban “Jobs-Housing” Patterns at a Fine Scale

Dec 2018 – Dec 2019

Research Assistant, advised by Professor Yao Yao, China University of Geosciences

Wuhan, China

- Designed a Deep Learning model based on accurate mining of semantic information in high-resolution remote sensing images to reflect mixed spatial distribution of a city
- Utilized social media data of more than 500k random users within 3 months in 2.6k communities from a location-based service provider in China, then discretized user data to classify remote sensing images
- Deployed a deep bag-of-features network (BagNet) and achieved overall fitting accuracy of more than 85%

Ship Recognizing Based on Deep Learning

Sep 2017 – Jun 2018

Industry University Research Team Leader, advised by Professor Xiuguo Liu, China University of Geosciences

Wuhan, China

- Implemented Faster R-CNN deep learning framework with Tensorflow to recognize multi-scale target under complex backgrounds
- Utilized DC-GAN to generate ship samples and employed ResNet model plus ELU activation function to increase accuracy and gained a overall accuracy of more than 98.6%

WORK EXPERIENCES

Wuhan AntGIS Co., Ltd

Jan 2018 – Mar 2018

Software Engineer Intern

Wuhan, China

- Developed a new Android function to control unmanned aerial vehicle
- Designed and executed new feature to set flight route automatically and take photos when flying around a target, and enable users to view, select and upload photos
- Embedded above newly-developed functions into current National Land Resources Mobile Office System

SELECTED PROJECTS

Music Recommendation System

Dec 2019 – Jan 2020

- Crawled original playlist data of Netease Cloud and performed data pre-processing to extract information
- Deployed collaborative filtering algorithm to build a song recommendation prediction model and migrated word2vec to develop a song sequence model

Credit Card Fraud Detection

Oct 2019 – Nov 2019

- Cleaned more than 50k financial loan data and filtered useless features, then altered weights of positive and negative samples to solve sample imbalance problem
- Established machine learning models to predict whether to issue loans, then selected different combinations of features and compared performances of different models

SKILLS & INTERESTS

- **Skills:** Python, SQL, R
- **Tools:** MySQL, Pandas, Numpy, AWS, Git, Tensorflow, Pytorch
- **Interests:** Soccer (Member of School Team), Dizi (Chinese Bamboo Flute)