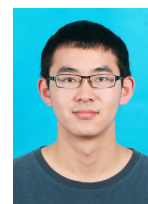# Mo Zhiliang

Work experience: 5 Years ǀ Education: Master ǀ Age: 32 ǀ Gender: Male
Location: Singapore(Employment Pass)
Email: mzl9039@gmail.com   TEL: +65 80321171

Education

Zhejiang University, Cartography and Geographic Information System, Master	2014.9 - 2017.3
Zhejiang University, Geographic Information System, Bachelor	2010.8 - 2014.6

Related Work Experience

Shopee Co., Ltd.
  Senior Data Scientist   2019.1 - 2021.8

Map Geocoding Service: 2021.1-2022.9
- Responsible for geocoding service: online stability and accuracy improvement of the service(QPS: 90, p95: 205ms)
- Retrieval improvement: customised BM25 for map point data, improved retrieval accuracy by 0.8%-3.1% and service accuracy by 1.0%
- Ranking improvement: optimised ranking accuracy from training dataset, feature, rerank and post-processing, improved service accuracy by 6%-8%

Hangzhou Hikvision Digital Technology Co., Ltd.
  Big Data Algorithm Engineer   2019.1 - 2021.8

The Project of Dealing With Truck Overload Scientifically: 2020.11- Present
- Trained a model to classify the overload state of the truck according to the GPS trajectory labelled by the fixed weighing devices' records (AUC 0.96 and positive samples' PR 92%,70%) and predicted the overload state of the truck in other places with LightGBM.
- Clustered a set of hot routes according to the trucks' overload sub-trajectories.

The Project of Digital Restoration: 2019.9-2020.6
- Regenerated the trajectory of a person in multiple cameras and generated the model of the buildings where cameras are located by following the IndoorGML standard.
- The product has been used in dozens of hotels and local police stations.

The Project of Trajectory Preprocessing: 2019.1-2019.8
- The algorithm of this project has been applied in several ITS products, e.g. the project above.
- The algorithm identified a vehicle's routes in the road network according to its GPS trajectory and the precision of this algorithm reached 89%.
- The algorithm can be applied to large scale road network up to millions of edges.

Hangzhou Hikvision Digital Technology Co., Ltd.
  Big Data Development Engineer   2017.4 - 2018.12

The Project of Tracking Trajectories Passing Multi-Cameras: 2018.9-2018.12
• Reproduced the trajectory of a person by tagging face and body images in multi-cameras.
The development and maintenance of Video Big Data Application: 2017.4-2018.4
• Achieved the automated test of the application based on jenkins.
• Gained a 50% performance improvement by optimizing second troubleshoot application.

Competitions

| Kaggle - Foursquare Location Matching | 32/1079(top 3%) | 2022.4 - 2022.7 |

• Finishing pipeline and improvements: text pre-processing, distance & text retrieval, two-stage ranking & classification
• Retrieval: text & distance retrieval based on Elastic search, max IOU: 0.9892
• Feature Engineering: more than 400 features including distance features, text distance features, word2vec embedding, TF-IDF features, graph structure features, other features
• two-stage ranking & classification: training ranking/classification models based on LightGBM

Others

Language Skill: CET 6(College English Test Band 6)
Self Introduction: Keep reading domain related papers, following latest research progress.
Professional Skills：
• Python and basic java language
• Distributed and big data components(e.g. spark/Elastic search)
• Linux, Git and so on.