# Mo Zhiliang

Work experience: 5 Years | Education: Master | Age: 32 | Gender: Male

Location: Singapore(Employment Pass)

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#### **Education** —

Zhejiang University, Cartography and Geographic Information System, Master

Zhejiang University, Geographic Information System, Bachelor

2014.9 - 2017.3

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 by training dataset, feature, rerank and post-processing and 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

- Finished pipeline and accuracy improvements: text pre-processing, distance & text retrieval, ranking model & classification model
- Retrieval: text & distance retrieval based on Elasticsearch, max IOU: 0.9892
- Feature Engineering: more than 400 features including distance features, text distance features, word2vec embedding, TF-IDF features, graph structure features and other features
- Ranking & classification: trained ranking/classification models based on LightGBM, IOU: 0.90985

#### Others -

### Language Skill: CET 6(College English Test Band 6)

Self Introduction: Keep reading domain-related papers and follow latest research progress.

#### Professional Skills:

- Python and basic java language
- Distributed and big data components(e.g. spark/Elasticsearch)
- · Linux, Git and so on.