

# Mo Zhiliang

Work experience: 5 Years | Education: Master | Age: 32 | Gender: Male  
Location: Singapore(Employment Pass)  
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## Education

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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

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**Shopee Co., Ltd.** 2021.10 - 2022.9  
**Senior Data Scientist**

Map Geocoding Service: 2022.1-2022.9

- 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.** 2019.1 - 2021.8  
**Big Data Algorithm Engineer**

The Project of Dealing With Truck Overload Scientifically: 2020.11- Present

- Classified overload state: trained models to classify the overload state of 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 trucks in other places with LightGBM.
- Generated hot routes: clustered a set of hot routes according to the trucks' sub-trajectories if overloaded.

The Project of Digital Restoration: 2019.9-2020.6

- Regenerated trajectory: regenerated the trajectory of a person in multiple cameras.
- Generated model of buildings: generated the model of the buildings(where cameras are located) by following the IndoorGML standard.
- Used in many places: this product has been used in dozens of hotels and local police stations.

The Project of Trajectory Preprocessing: 2019.1-2019.8

- Applied in several ITS products: e.g. the project above.
- Regenerated route of vehicles: identified vehicle's route in the road network according to its' GPS trajectory, precision of this algorithm reached 89%.
- Applied on scaled database: the algorithm was applied to road database 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 trajectory: reproduced trajectory of persons by tagged face&body images in multi-cameras.

The development and maintenance of Video Big Data Application: 2017.4-2018.4

- CI/CD: Achieved the automated test of the application based on Jenkins.
- Optimised performance: gained 50% performance improvement by optimising second troubleshoot application.

## Competitions

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**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

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**Self Introduction:**

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

**Language Skill:**

- CET 6(College English Test Band 6)

**Professional Skills:**

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