

Summary

Experience with data mining, data analysis, machine learning, and web crawling.
Hopes to focus more on data science and data engineer in future career.

Work Experience

Tripreso - Data Engineer

Oct. 2018 - Now

- Analysis travel data and build a machine learning model. Estimating increase 3% orders (revenue).
- Maintain and develop an ETL distributed queuing system with 20 machines.
- Optimize the ETL system reduced more than 50% execution time.
- Develop new product crawler let product volume increase 1.5%.
- Making analysis charts provide for other departments.

NDHU - RA

Mar. 2016 - Aug. 2017

- Analysing G7 financial data. Model validation and parameter estimation by regression models (SUR, MLE, Bootstrapping). And comparing single equation estimators and confidence interval with system equation.

Projects

FinMind python package

280 stars on github.

- Open source of financial data, more than 40 data, more than 100 million stock trade data.
- Develop Api with python and flask.
- Automatic update daily by distributed queue system, rabbitmq and celery (8 cloud machines).
- Develop web by django and visualize data by dash (<http://finmind.servebeer.com/>).

TaiwanTrainVerificationCode2text python package

60 stars on github.

- The verification code consists of 26 English and 10 digits, which may be 5 or 6 yards.
- Simulate generating 100,000 images and building CNN models to fit and predict.

CIFAR-10 (Kaggle)

87% classification accuracy.

- Using pre-trained VGG and ResNet models classify objects.

Bosch Production Line Performance (Kaggle)

Post-competition analysis, top 6% rank.

- Highly imbalance data, ratio is 1000 : 1, 10 GB dataset size. And the data is 50% missing value. More than 4000 variables, but I build models by only 50 features.
- The goal is to predict which parts will fail quality control.

Grupo Bimbo Inventory Demand (Kaggle)

Post-competition analysis, top 8% rank.

Rossmann Store Sales (Kaggle)

Post-competition analysis, top 10% rank.

- Time series problem, eighty millions data size. Building models predict inventory demand after 2 weeks and predict sales after 48 days.

Skills

- Experience with **data mining** and **feature engineering** by Python and R.
- Experience with **machine learning** by Python (**xgboost-gpu**) and R (**xgboost, svm, random forest, knn**).
- Experience with **deep learning** by Python (**kears-CNN, LSTM, GRU**).
- Experience with **distributed queue system** web crawling by Python (**Cloud Linode**).
- Experience with **API** development..

Education

National Dong Hwa University

Master of Science, Sep. 2017.

Major : Mathematics and Statistics.

Tamkang University

Bachelor of Science, Sep. 2015.

Major : Mathematics.