Summary

Experience with data mining, machine learning, and web crawling.

Hopes to focus more on data science and data engineer in future career.

### Skills

- Experience with data mining and feature engineering by Python ( numpy, pandas, sklearn ) and R ( parallel, dplyr, data.table, mice ).
- Experience with machine learning by Python ( xgboost-gpu ) and R ( xgboost, svm, random forest, knn ).
- Experience with deep learning by Python ( kears-CNN ).
- Experience with connecting MySQL by Python (pymysql) and R (RMySQL).
- Experience with regression by R (glm, glmnet, nls, sur, mle).
- Experience with web crawling by Python ( request, BeautifulSoup, selenium ).
- Execting deployment MySQL on ubuntu. Changing IP address to entity address by No-IP and installing SSL certificates by Let's Encrypt.

**Projects** 

# **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 machine learning 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.

• Time series problem, eighty millions data size. Building models to predict inventory demand after 2 weeks.

# Rossmann Store Sales ( Kaggle )

Post-competition analysis, top 10% rank.

• Time series problem. Building models to predict sales after 48 days.

## **Instacart Market Basket Analysis (Kaggle)**

Real competition, top 25% rank.

• Predicting which products will an consumer purchase again.

## **Open Source of PTT Data**

80 stars on github.

• Automatic crawling PTT data daily, and providing open data, more than six millions article, in MySQL.

### FB-ChatBot

• Automatic ordering Taiwan train tickets, and recognizing Taiwan train verification codes by CNN models.

Education

### **National Dong Hwa University**

**Tamkang University** 

Master of Science, Sep. 2017.

Bachelor of Science, Sep. 2015.

Major: Mathematics and Statistics.

Major: Mathematics.

Work Experience

### 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.

NDHU - TA Sep. 2015 - Jul. 2017

• Calculus, Linear Algebra, Statistics.

Languages

## R, Python.

Basic in English and proficient in Chinese.