

Summary

5-6 years experience with data engineer and soft engineer. (Distributed Queue System, RMDB, NoSQL, TSDB, Web Crawling, RESTful API, ETL, Docker Swam, GKE(K8S), CICD, GCP, Airflow ...etc.)

1-2 years experience with data science. (Data Analysis, Machine Learning and Deep Learning)

Github project get 1,800 stars.

Work Experience

17 LIVE - Senior Data Engineer (IC5)

May. 2021 - Now

- The main developer for refactor ETL. Creating a airflow project by **Cloud Composer** to transfer ETL tools from digdag to airflow and transfer ETL develop method from shell script to python. (More than 20 large pipelines.)
- Maintenance **BigQuery** more than 300 tables and more than 10 TB data.
- Create pipelines from backend team, multiple mysql and mongodb, and appsflyer to bigquery.
- Create Data Team's first **real-time ETL system via GKE, Pub/Sub and Memorystore** for sending push notifications to users. (Graceful Shutdown is also set.)
- Create a **good development culture**, including the introduction of **CICD, dev-stage-uat-master, release news, unit tests and test coverage** .
- **Using Airflow unified scheduler job**, like cloud function scheduler, bq scheduler, crontab, and ML model by R or Python ...etc.
- Create Data Team's first **real-time ETL system via GKE, Pub/Sub and Memorystore** for sending push notifications to users.
- Create Data Team's first **API via GKE for ML model, include achieve graceful shutdown, run stress test via ApacheBench**, and setup auto-scaling by hpa. 95% latency is under 200ms and RPS is over 200.
- Create a **Tagging System** for tracking groups of users.
- Create a **BigQuery Resource Monitor** to monitor users BQ slot and query count usage.
- **Reduce data team 25% cost**.
- Keep SLO above 98.
- Create document culture by **confluence**.
- The finalists of **Break the Norm** awards on 2021-Q3 and 2021-Q4.
- Assist in **interview** more than 10 new data engineer.
- **Mentor** junior data engineers to be more effective individual contributors.
- Apply the data team's models to the company's APP. (**automatically send push notifications and in-app messages**)
- Automatically update **recommend streamer** list via data team's models to the company's APP.

SinoPac Holdings - Software Engineer

Nov. 2019 - May. 2021

- Develop **python, C#** api for stock/option/future trading.
- Setup **CI/CD** with github actions and gitlab-ci to publish package and unit testing.
- Deploy a test system to simulate trading.
- Collecting distributed system log by **elk, grafana** and **prometheus**, 13 GB log data/day.
- System monitor of api latency, worker alive and user request count by **telegram bot**.
- Develop **transaction-by-trade and odd lot trading** API.

Openup Speaker (FinMind)

2019-12-01

Tripresso - Data Engineer

Oct. 2018 - Oct. 2019

- Analysis travel data and build a machine learning model. Estimating increase **3%** orders (revenue).

- Maintain and develop an **distributed queuing system for web crawling** with 20 machines.
- Optimize the ETL system reduced more than **50%** execution time.
- Develop new product crawler let product volume increase **1.5%**.
- Making **BI charts** provide for other departments.

Publications

- Published a book related to data engineering. Python 大數據專案 X 工程 X 產品資料工程師的升級攻略. On major platforms, like tenlong, books, momoshop ...etc, the weekly sales are the highest TOP 1, and the monthly sales are the highest TOP 2.

Projects

FinMind python project

1,800 Stars On Github. Sep. 2017 - Now

- 3 team member.
- Create a payment flow by **ECPay**, and getting some order from user.
- More than **2,000 people registered**.
- Open source of financial data, more than 50 dataset, more than **1 billion, 200GB**.
- **10 million** data per day.
- **Deploy restful api, backend, web, crawler, rabbitmq, mysql, dolphindb, redis and loading balance by docker swarm and traefik.**
- Transfer dataset from mysql to dolphindb, **reduce 80% (150GB)** data size.
- Using scheduler to automatic update data by **airflow, rabbitmq and celery** (8 cloud machines).
- Automated deployment web, backend and api by **CI/CD**.
- Using **vue, python and django** to develop web pages. (<https://finmindtrade.com/>).
- The API has more than **100,000** requests per day. Upper bound of api is **8,000/minute** request by ApacheBench.
- Design data pipeline for crawler, backend and analysis by **airflow**.

Bosch Production Line Performance (Kaggle)

Post-competition analysis, top 6% rank.

Grupo Bimbo Inventory Demand (Kaggle)

Post-competition analysis, top 8% rank.

Instacart Market Basket Analysis (Kaggle)

Final top 25% rank.

Education

National Dong Hwa University (GPA : 3.87)

Master of Science, Sep. 2017.

Major : Mathematics and Statistics.

Tamkang University

Bachelor of Science, Sep. 2015.

Major : Mathematics.