Yi-Fan(Jeff) Shih

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EXPERIENCE

Advantech Inc, *Backend Software Engineer*   Jun'20 - Jul'21
- Developed the Go SDK for the customer to assuredly send IoT device data through MQTT to RabbitMQ.
- Asynchronously analyzed data changes (**1.2 billion** lines per 20 minutes) by using go routine (**Go**).
- Optimized **MongoDB** schema and queries: Increasing **10%** efficiency of aggregated queries, **8%** efficiency of inserted queries, and decreasing **600%** of disk usage (**200%** on index usage) as measured by the QA's benchmarking report.
- Re-architected a web service, e.g.: from HTTP to **gRPC**, from Monolithic to **Microservices.**
- Developed backend functionalities interacting with **RESTful APIs**, e.g.: VO, DAO. (**NodeJS**)

New York University, *Teaching Assistant in Introduction to Java*   Jan'20 - Jun'20
- Assisted professor in class, graded/provided feedback for 70+ students coding homework and held office hours.

EDUCATION

New York University, United States   Sep'14 - May'22
M.S., Computer Science, GPA:3.8 / 4.0
- Algorithm, Advance Database, Cloud Computing and Big Data, Computer Vision

National Chiayi University, Taiwan   Sep'14 - Jun'18
B.S., Computer Science and Information Engineering, GPA:3.87 / 4.0
- Algorithm, Data Structure, Software Engineering, Introduction to Artificial Intelligence

PROJECTS

NYC CityStreets *https://github.com/KShih/fall2019-cs-gy-6063-team-five_fries*   Sep'19 - Dec'19
Course project, Product Owner and Programmer
- A renting app that integrated 3rd party renting services to let users search apts from different sources in one click.
- Optimized external API fetching time by **70%** by using **Celery** and **Redis** on background fetching.
- Achieved **94%** test coverage by **unit testing on** the internal and external API. (**Python, pytest**)
- Introduced **CI/CD** to this **Django web application** hosted on Heroku (PaaS) by using TravisCI + GitHub.

Restaurant Recommendation Chatbot   Aug'19 - Apr'20
Side project, https://github.com/KShih/dining-chatbot
- Built a restaurant recommendation chatbot with serverless microservice architecture on **AWS**.
- Integrated S3, API Gateway and SQS with Lambda to implement on-demand service.
- Decreased **30%** response time by using **DynamoDB** and **ElasticSearch** on the big data of Yelp API. (**NodeJS**)

TECHNICAL SKILLS

Programming Language: Go, Java, Python, JavaScript (NodeJS, React);   **Platforms**: AWS, K8s, Heroku;
Database: MongoDB, DynamoDB, PostgreSQL, MySQL, SQLite;   **Operating Systems:** Linux

AWARDS

- **2015 ITSA Annual Collegiate Programming Contest (Top 4 out of 64 Teams)**   Jan'15 - Jun'15
  C/C++ Algorithms Programming contest.
- **The Third Place, 2016 Smart City Hackathon (32 Teams)**   Nov'16
  Web Application: Provided users with a newly intuitive forum reading experience.