YANG CHENG

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EDUCATION

Carnegie Mellon University, Silicon Valley   September 2022 - (Dec 2023)
M.S in Software Engineering
Courses: Foundations of Computer Systems, Foundations of Software Engineering

National Taiwan University (NTU), Taipei, Taiwan   September 2016 - June 2020
B.B.A in Information Management
Courses: Algorithms, Data Structures, Operating Systems, Computer Networks, Web Programming, Machine Learning, Deep Learning in Computer Vision, Digital Speech Processing

WORK EXPERIENCE

Shopee, Singapore   July 2020 - June 2022
Software Engineer / Backend

· Developed RESTful APIs for banner system to support campaigns that target millions of users [**Golang, Python, MySQL**].
· Worked with Data Science team to serve personalized banners to users based on their interests and past purchases.
· Refactored legacy system to improve system performance and maintainability.
· Perform stress tests and fine tune system to enhance system robustness.
· Set up monitoring dashboards and stand by during major campaigns to ensure service up-time and fix urgent issues [**Grafana, Prometheus**].

PROJECTS

PDOGS online judging system   June 2021 - September 2021

· Led 5-member backend team to develop APIs for an online code assessment system for NTU students [**FastApi, PostgreSQL**].
· Collaborated with stakeholders (frontend developers, UX designer and users) to design user-friendly system that enables thousands of students to submit and check the correctness of their code to facilitate programming learning.
· Re-factored existing system to improve the system capacity by tenfold (up to 1000 QPS).

Music separation and Transcription   February 2019 - December 2019

· Collaborated with 5 teammates to design a system that separates singing voices from background accompanying music and transcribes music into music sheets using deep learning [**Pytorch**].
· Developed a full-stack website to host the deep learning model and allow users to upload music files for separation and transcription [**Django, React**].

Kaohsiung port captain scheduling system   July 2018 - June 2019

· Collaborated with 7 team members to develop a scheduling system for captains of Kaohsiung port.
· Developed RESTful APIs for frontend web page and mobile application [**Django, MySQL**].
· Designed scheduling algorithm to balance workload and reduced variance in work hours across staff by 15 percent.

SKILLS

Programming Languages: Python, Go, Node.js, C++
Backend / Databases: Django, Flask, Express.js, MySQL, PostgreSQL, MongoDB
Tools / Packages: Git, Prometheus, Grafana, Pytorch
Language: Chinese(Mandarin), English