Cheng-Chuan(Zeno) Peng

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SKILLS

Programming Languages: Python3, C#, Node.js, Java, Go, Shell Script
Backend: .NET Core/MVC, Python Flask/Django, Express.js, Spring Boot
Databases: MySQL, MSSQL, MongoDB, Hbase, Hive, Snowflake
Tools and Platforms: Linux, Git, AWS, Azure, Docker, OpenShift, Hadoop, Splunk, NiFi, Airflow, Opentelemtry

WORK EXPERIENCE

Splunk
San Jose, CA
Software Engineer Intern — *May 2023 – Aug 2023*
- Contributed to the **open source** project "opentelemetry-collector-contrib" (2.1k stars) within **OpenTelemetry** by refactoring its core library, transitioning from opensus to pdata, catalyzing a robust 20% increase in data measurement efficiency
- Developed and maintained one of receivers within **OpenTelemetry** using **Golang, Kubernetes, and Kafka**
- Orchestrated 2 flaky tests through **CI/CD pipeline** on MacOS and Windows systems to ensure availability

Advantech
Taiwan
Backend Engineer — *Jul 2021 – Apr 2022*
- Architected, implemented education system for 100+ users and update courses by **Azure Pipelines**, **Azure Blob**, **.NET MVC**
- Optimized **MSSQL** to speed up data access by 40% for product retrieval and reduced APIs response payloads by 20% via **.NET MVC**
- Designed APIs for users to manage product items on web platform, integrating functionalities like image storage by **Azure Cosmos DB, Azure Blob, MSSQL**, **.NET Core**

Titansoft
Taiwan
Backend Engineer — *Feb 2021 – May 2022*
- Facilitated user authorizations, integrated APIs, and connected games via **.NET Core**, **Redis**, **GRPC**, **GCP Spanner**
- Cataloged player metrics via **GCP Pub/Sub,** enabling transaction data assimilation for tracking player points

Micron Technology
Taiwan
Software Engineer — *Dec 2019 – Jan 2021*
Project: WebApp: Authentication System
- Authenticated 80 users' identities daily on a designed web application with **JWT token, APIs** using **Flask**, and bolstered **Gunicorn**
- Monitored web system by deploying **Docker** and **Openshift** for resource allocation and scheduled tasks by cronjob
- Refactored 5 yield APIs, ensuring interoperability and integration on the platforms

Project: Fab Yield System
- Deployed 17-tables (5GB/day) **ETL** pipelines with **NiFi,** and **MySQL** to store industry-specific data on **Hadoop, Hive, HBase**
- Reduced query time by 60% by joining and aggregating different views on diverse **Hive** views
- Monitored 12 data and developed dashboards to visualize data, ensuring data quality and monitoring website health using **Splunk**
- Collaborated with global team to troubleshoot and resolve 10+ data pipeline issues across **MySQL**, **MSSQL**, **Snowflake** platforms
- Integrated **Avro** to push structured and semi-structured data into **Snowflake**, ensuring data integrity and consistency
- Employed **Airflow** to automate triggering of APIs, transmission data by Splunk to track web application dynamics

Delta Electronics
Taiwan
Software Engineer Intern — *Jul 2017 – Aug 2017*
- Built knowledge extraction system by integrating Java Packages and **NLP APIs** through **Flask** and **Jpype**
- Researched and built a Chinese Error correction system through deep learning models

EDUCATION

Carnegie Mellon University
Mountain View, CA
Master of Science in Software Engineering — *Aug 2022 – Dec 2023*
Courses: Foundations Software Engineering, Foundations Computer Systems, Software Design and Architecture, Software Testing

National Tsing Hua University
Taiwan
Master of Science in Information Systems and Applications GPA 4.0/4.3 — *Jul 2016 – Jun 2019*
- Courses: Programming, Operating Systems, Game Theory, Cloud Programming, Advanced Databases, Natural Language Processing, Data Mining, Machine Learning, Deep Learning, Multimedia Music Design

National Chengchi University
Taiwan
Bachelor of Journalism GPA 3.69/4.0 — *Sep 2013 – Jun 2016*
- Courses: Data Structure, Algorithms, Database, Network Introduction, Programming Language, XML Applications, Probability

Academic Projects

Course Meeting Room/ Software Architecture / Carnegie Mellon University
2022
- Setup **Docker** to build microservice infrastructure with API gateways, using **Node.js** for chain of responsibly to handle API requests
- Developed and integrated user identity validation features using **Swagger** for API, **Flask, MongoDB**
- Implemented a real-time chat interface using **JavaScript**, enabling user interaction within a chat room environment

Trash Monitoring / Cloud Programming / National Tsing Hua University
Feb 2017 – Jun 2017
- Conceptualized and launched a website for monitoring amount of waste by **Node.js, AWS Lambda/SQS/RDS/S3, Google Map API**
- Utilized **AWS Cognito** for administrator authentication, ensuring a secure way for waste metrics analysis