

# 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, Opentelemetry

## WORK EXPERIENCE

### Splunk

San Jose, CA

**Software Engineer Intern, Observability Organization, Opentelemetry**

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, WISE-Marketplace**

Jul 2021 – Apr 2022

- Architected, implemented education search 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, Game Development**

Dec 2019 – Jan 2021

- 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

**Data Engineer, Smart MFG & AI**

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
- Collaborated with summer interns to generate product ideas and got 1<sup>st</sup> prize

## EDUCATION

### Carnegie Mellon University

Mountain View, CA

**Master of Science in Software Engineering**

Aug 2022 – Present

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 Management Systems, Network Introduction, Programming Language, XML Applications, Probability

## Academic Projects

### SmartWrite / Thesis / National Tsing Hua University

Sep 2018 – Jan 2019

Created Chinese Interactive Writing System for learning Chinese sentences by **Django**

- Developed and established a system by Chinese labels by Stanford Parser, **Hadoop**

### 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