Jung-Che Chang

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EDUCATION

Oregon State University — Corvallis, Oregon
Master of Engineering, Computer Science — Sep 2022 – Dec 2024
- Continued Success Scholarship

Tamkang University — New Taipei, Taiwan
Bachelor of Engineering, Computer Science and Information Engineering — Sep 2017 – June 2021

TECHNICAL SKILLS

Programming Languages: Java, Python, C/C++, JavaScript, SQL, Shell Script
Frameworks/Tools: Spring Boot, Node.js, Kubernetes, Docker, React, REST APIs, Amazon Web Services (AWS), Google Cloud Platform (GCP), CI/CD, Django, Grafana, Postman, Junit, Linux, Git
Databases: MySQL, MongoDB, Redis

WORK EXPERIENCE

American Energy Society, *Software Engineer Intern* — Palo Alto, CA | June 2023 – Sep 2023
Java, Spring Boot, React, JavaScript, Python, ETL pipelines
- Collaborated with a research team to develop an interactive global energy map using React and JavaScript, providing dynamic data visualization for over 10,000 users to explore energy trends
- **Engineered robust RESTful APIs** with Java and Spring Boot, optimizing system integrations, and enhancing data exchange functionalities across diverse platforms
- **Automated ETL processes** for extensive datasets from over 700 companies in 11 countries using Python, significantly **increasing workflow efficiency by 25%** and streamlining data operations
- **Conducted comprehensive API testing and validation** using Postman, achieving a **20% increase in bug detection**, and accelerating resolution times by 15%

RDM Technology, *Software Engineer Intern* — Taipei, Taiwan | May 2021 – Aug 2021
JavaScript, Node.js, Express.js, RabbitMQ, MySQL
- Developed a management application, achieving a **25% reduction in data processing times** and significantly enhancing operational efficiency
- Architected and deployed scalable backend solutions using Node.js and Express.js, incorporating RabbitMQ to **boost message processing efficiency by 30%**, effectively handling increased data throughput

PROJECTS

Cloud-native Banking Services System — Oct 2023 – Jun 2024
Java, Spring Boot, GCP, Kubernetes, Helm, Apache Kafka, Redis, Grafana, Prometheus
- Developed and deployed a microservices-based banking services system on Google Cloud Platform using Java and Spring Boot, orchestrated via Google Kubernetes Engine
- **Enhanced system security** by integrating OpenID Connect (OIDC), Keycloak, and Spring Security, effectively safeguarding the API gateway and ensuring robust authentication and authorization protocols
- **Implemented event-driven architecture** with Apache Kafka, significantly **improving data processing speed by 30%** and enhancing system scalability and responsiveness
- Engineered comprehensive observability and monitoring frameworks using Grafana, Loki, Promtail, Tempo, and Prometheus, thereby elevating system reliability and streamlining troubleshooting processes

Happy School — Feb 2024 – April 2024
Java, Spring Boot, CI/CD, AWS RDS, AWS Elastic Beanstalk
- Built a comprehensive school management application using Java, Spring Boot, and Thymeleaf, enhancing operational efficiency
- Architected and streamlined deployment processes via GitLab CI/CD pipelines, deploying applications to AWS Elastic Beanstalk, which minimized downtime and optimized deployment efficiency