HONGBO YI

in [LinkedIn](#) | ✉ [Portfolio](#) | 📱 202-341-2098 | M hb.yi2024@gmail.com

Skills

- TypeScript | JavaScript | HTML | CSS | JavaScript | TypeScript | React | Tailwind CSS | HTMX | alpine.js | JSON
- Golang | Python | Mockito | JUnit | Java | Java Spring | Spring Data JPA | Spring boot | AWS DynamoDB | Postgres | Oracle | Redis
- Helm Charts | Kustomize | FluxCD | Gtafana | Prometheus | Docker | Kubernetes | kubectl | Splunk

Education

M.B.A., Data Analytics Sofia University *Palo Alto ,CA, USA* 07/2022 - 06/2024

- GPA: 3.99/4.0 Relevant Courses: **Software Engineering, Algorithms & Automata, Data Science, and Data Visualization.**

M.S., Computer Science George Washington University *Washington, DC, USA* 09/2017 - 05/2019

- GPA: 3.86/4.0 Relevant Courses: **Machine Learning, Computer Vision, and Advanced Software Diagrams.**

Work Experience

Software Developer (Contractor) @ Apple DevOps System *CA, USA* 05/2023 - 10/2024

Web Application for AWS CloudWatch Logs Insights:

- Designed and implemented a web application in **Golang** to search and visualize with filter user activities on **Kubernetes** and AWS resources, automating **CloudWatch** query generation using regex for user behavior analysis.
- Developed a reusable frontend framework with **Go templates**, Tailwind CSS, HTMX, and **Alpine.js**, featuring navigation, light/dark mode, and CRUD operations template.
- Achieved a 95% reduction in operational query time by optimizing query logic and executing API calls concurrently with **batched requests**, significantly improving productivity and accelerating frontend development for future Golang applications.
- Provided on-call support for 5+ daily user and dev team issues, including deployment failures, AWS resource creation, etc.

Automating and streamlining the CI/CD pipeline

- Developed a CLI tool using **Golang** to generate **FluxCD** pipeline and **Helm chart** templates across multiple partitions, eliminating manual chart maintenance; to automate template detection during PR builds ensuring consistency and reducing manual intervention.
- Implemented a **Jenkins** pipeline with scheduled run, automating application onboarding to **AWS EKS** upon PR approval and successfully migrating 80+ applications from EC2 to AWS EKS.

Software Developer (Contractor) @ Apple Infrastructure System *CA, USA* 12/2021 - 05/2023

- Developed a web application to monitor Amazon EKS and Helm release related information across dev, and prod environments for 100+ teams using **Spring** and **React**, including checking pod status with filter and integrating redirection to **Splunk** for error logs.
- Designed and implemented **RESTful APIs** using Axios, with CRUD actions on PostgreSQL.
- Used AWS **CloudFormation** to define and deploy **DynamoDB** table schemas, including a jobs table for managing various job types; Utilized Partition Key and Sort Key with a global secondary index to accelerate queries.
- Leveraged **DynamoDB backups** for data recovery and implemented a **lock** mechanism using a dedicated lock table to prevent concurrent updates by multiple threads; Built a **cache** table in DynamoDB to enable efficient retrieval of deployment status

Software Developer (Contractor) @ Apple Monitoring System *CA, USA* 08/2021 - 12/2021

- Developed a new module with event-driven architecture to fetch, analyze and compare application binaries using **Spring Boot**
- Utilized **Spring Boot Actuator** for monitoring and assessing deployment statuses across environments.
- Designed **Oracle SQL** database tables to track application state and environment-specific details, and applied **Shedlock** for task locking to prevent duplicate execution in multi-node environments.
- Implemented **Hazelcast** for in-memory caching to enhance performance and reduce database load.

Certifications

- AWS certified cloud practitioner, received on 09/07/2021.
- Certified Kubernetes Administrator (CKA), received on 04/03/2023.
- Certified Kubernetes Application Developer (CKAD), received on 05/09/2023.
- Certified Kubernetes Security Specialist (CKS), received on 09/29/2023.