

Tan Chin Siang

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PROFESSIONAL SUMMARY

Backend & Cloud Software Engineer with 3+ years of experience designing scalable microservices and cloud-native platforms across Azure and AWS. Experienced in Go (Golang), TypeScript/NestJS, Terraform, Kafka, Kubernetes, and event-driven architectures. Hands-on experience modernizing enterprise systems through Azure-to-AWS migration, microservice re-engineering, infrastructure automation, and cloud cost optimization. Passionate about building high-performance backend systems, improving reliability, reducing operational costs, and applying cloud best practices in production.

PROFESSIONAL WORKING EXPERIENCE

Electrolux Home Appliance Sdn Bhd

Selangor, Malaysia | 05/2026 – Present

Backend & Cloud Software Engineer

- Participated in migration of enterprise backend services from Microsoft Azure to AWS, improving cloud scalability and simplifying long-term infrastructure management.
- Re-engineered existing backend microservices into Go (Golang), improving performance, maintainability, and resource utilization.
- Implemented Infrastructure as Code using Terraform for cloud provisioning and environment consistency.
- Developed event-driven integrations using Kafka/Azure Event Hubs for reliable asynchronous communication.
- Implemented automatic Azure IoT Hub SKU scaling based on real-time capacity utilization, reducing cloud infrastructure cost while preventing service throttling.
- Optimized backend services and cloud resource utilization through performance tuning, monitoring, and architectural improvements.

Tech Stack: Go, Python, Java, AWS, Azure, Terraform, MongoDB, Kafka, Kubernetes, Docker

Telekom Research & Development Sdn Bhd

Selangor, Malaysia | 05/2023 – 05/2026

Backend Software Engineer

HR Systems Development (ERA/JESSICA Project)

- Spearheaded backend enhancement and refactoring of legacy HR system, improving scalability, maintainability, and performance, resulting in a 3x increase in throughput, scaling from 1000 to over 3000 concurrent users
- Proposed and led the company's first Go-based microservice (REST API); secured supervisor approval and delivered the initial service to validate Go for production use
- Developed RESTful APIs with robust security measures, implementing Multi-Factor Authentication (MFA) and Google reCAPTCHA integration
- Implemented event-driven architecture using RabbitMQ for asynchronous employee data synchronization and task scheduling
- Integrated LinkedIn API for Learning module, enabling enriched employee training and development insights
- Instrumented services/metrics dashboards with Prometheus + Grafana

Smart Forestry Platform

- Built data-driven dashboard APIs for forest wildlife monitoring, serving real-time animal population and environmental metrics
- Designed and implemented Apache Airflow data pipelines for automated SFTP data retrieval and processing
- Designed DAGs (Directed Acyclic Graphs) for end-to-end data workflow orchestration from extraction to centralized storage

IoT Water Monitoring System (SWIMS2.0)

- Implemented Keycloak-based authentication with Role-Based Access Control (RBAC) for secure user management
- Developed high-performance REST APIs for real-time and historical water quality data visualization and analysis

Tech Stack: NestJS, TypeScript, Node.js, Go, MySQL, MariaDB, PostgreSQL, MikroORM, TypeORM, RabbitMQ, Apache Airflow, Kubernetes, Docker, Keycloak, OAuth, Prometheus, Grafana, Jest

Xeersoft Sdn Bhd

K.L., Malaysia | 05/2022 – 04/2023

Software Developer

- Contributed to system upgrades and feature improvements for accounting platform using modern web technologies
- Developed and maintained REST APIs with PHP Slim4 framework to enable seamless integration for web and mobile applications
- Implemented performance optimizations that enabled ERP system efficiency and user satisfaction

Tech Stack: PHP, Slim4, MySQL, JavaScript, jQuery, Bootstrap, HTML, CSS

Technical Skills

Languages: Go (Golang), Typescript, Javascript, Python, PHP

Cloud: AWS, Azure

Backend: REST APIs, Microservices, Event-Driven Systems, Distributed Systems, High-Concurrency Services

Infrastructure: Terraform, Docker, Kubernetes, Github Actions, CI/CD

Messaging: Kafka, RabbitMQ, Azure Event Hubs, AWS MSK

Databases: PostgreSQL, MySQL, MariaDB, MongoDB

Observability: Prometheus, Grafana, CloudWatch, Azure Monitor, DataDog

Security: IAM, OAuth2/OIDC, RBAC, Keycloak

Spoken Languages: English, Chinese, Malay

Soft Skills: Work Ethic & Ownership, Continuous Improvement, Clear Written and Verbal Communication

CERTIFICATIONS

Node.js Application Developer *OpenJS Foundation 2024*

AWS Digital Badge Portfolio

Certified Associate in Back-end Development

Certified Associate in Front-end Development

View Complete Certification History on LinkedIn

EDUCATION

Xiamen University Malaysia

Bachelor of Engineering in Software Engineering (Honours)

- Cumulative **GPA**: 3.05/4.00

Sepang, Malaysia | 04/2018 – 04/2022

Tsun Jin High School

Malaysia Independent Chinese Secondary School

Unified Exam (UEC)

- UEC results: 2As, 4Bs
- Volleyball Club Team Leader
- Student Representative for Malay Subject

Kuala Lumpur | 01/2012 – 12/2017

REFERENCES

Available upon request