

NGUI TZE KEN

Software Engineer

git.riftpixel.com

isaacntk

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SKILLS

- Java
- Kotlin
- Python
- TypeScript
- SQL
- Networking
- Git
- Linux
- Kubernetes
- Docker
- CI/CD
- Infra as Code

EDUCATION

GCP Associate Cloud Engineer

Jan 2022

AWS Solutions Architect

Mar 2021

Staffordshire University

Software Engineering | 2013 - 2017

Dual Degree BSc (Hons) - 3.83 CGPA

Asia Pacific University

Software Engineering | 2013 - 2017

BSc (Hons) - 3.83 CGPA

EXPERIENCE

Software Engineer

Nov 2022 - Present | Amazon Web Services

- Designed and developed a **cell-based** orchestrator for **AWS Billing** to accelerate the monthly billing process and automate previously manual steps. This project has resulted in an annualized **\$659MM** impact in FCF for 2024
- Developed an internal service which handles the classification of **8 million accounts** in AWS, facilitating **AWS Billing** in reducing bill calculation time
- Wrote self mutating, configurable CI/CD pipelines using **AWS CDK** which incorporates integration tests, canaries and automatic rollbacks
- Optimized an **AWS Lambda** function to bring its memory usage down from **10GB to 370MB** and duration from 9 minutes **down to 1 minute** by refactoring into a Java stream

Software Engineer

January 2018 - Oct 2022 | Accenture

- Developed multiple banking/fintech projects in the APAC region using **Java Spring Boot** microservices and **Kafka** deployed with **Kubernetes**
- Led a back-end team of 3 developers and maintained a unit **test coverage of over 90%** for the Sonarqube scan on our **Jenkins CI/CD** pipelines
- Deployed applications on on-premise **JBoss** servers, fully cloud-based and hybrid on-prem+cloud with **AWS direct connect**
- Designed transaction reporting solutions for a corporate portal banking app which used **Kafka** and Camunda rule engine
- Developed middleware for a digital lending app that **reduced metered API calls by 75%** by caching data with **Redis**
- Developed an authentication solution for a banking application which utilized **Thales HSM** and 2FA

PROJECTS AND AWARDS

Homelab - Ongoing

Tinker with a home kubernetes cluster using gitops to deploy services like Nextcloud, GitLab and some personal projects. Also to explore machine learning and multi-modal generative AI models

Innovathon 2023 - AWS - Sep 2023

Won an internal hackathon by pitching and developing an idea which leveraged **AWS Lambda** and **DynamoDB** to stop fraudulent accounts from being billed

Tech Star SEA FY'19 - Accenture - May 2019

Was one of only 11 employees across Singapore, Malaysia, Indonesia and Thailand awarded based on our impact in projects

Top Idea & Execution - Microsoft Windows Phone development workshop - May 2013

Developed a music visualization app on Windows Phone on the **UWP platform** during a windows phone workshop