

TEO JIA YI ZOE

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OBJECTIVE

Backend software engineer with expertise in Python, FastAPI, Django, and cloud infrastructure. Passionate about designing scalable, secure, and efficient backend systems.

WORK EXPERIENCE

Government Technology Agency

JAN 2022 - JAN 2025

Cybersecurity Engineer (Backend Engineer)

- Developed and maintained backend services for government applications using Python and Django REST Framework
- Architected and deployed a multi-cloud application (AWS & Azure), leveraging Terraform for infrastructure automation, enhancing security and compliance
- Built and optimized RESTful APIs, reducing response time through query optimization and caching
- Automated infrastructure provisioning and configuration management with Terraform, cutting manual deployment time by 50%
- Developed and fine-tuned an LLM-powered chatbot, reducing incident resolution time by 60%
- Integrated AWS Config with backend systems to enable real-time compliance monitoring
- Implemented Elasticsearch for observability, improving debugging and system health analysis

Amazon Web Services (AWS)

APR 2021 - DEC 2021

Solutions Architect

- Designed Proof of Concepts (PoCs) demonstrating scalable backend architectures using AWS to meet client requirements, successfully demonstrating potential solutions
- Designed and presented technical solutions through architectural diagrams and demonstration, effectively communicating complex concepts to stakeholder
- Advised end-users on AWS best practices (IAM security, API Gateway, Lambda, ECS, S3, RDS), enhancing system reliability and scalability

Accenture

MAR 2020 - APR 2021

Business & Technology Delivery Analyst

- Designed and implemented Java microservices, ensuring high scalability
- Migrated legacy COBOL codebases into modular Java-based microservices, incorporating enhancements to optimize system performance and reduce inter-service dependencies
- Conducted unit testing, debugging, and code reviews to maintain code quality and identify opportunities for optimization
- Troubleshoot and resolved software defects and issues
- Collaborated with cross-functional teams to analyze requirements and current software system

Accenture

SEP 2019 - FEB 2020

Functional Analyst (Intern)

- Assisted in the design and implementation of backend application logic and configuration, collaborating with senior analysts to meet project requirements
- Updated requirements based on mined data, ensuring alignment with user expectations, which reduced the need for post-deployment changes

- Conducted defect analysis using data mining techniques to identify patterns and areas for additional testing, leading to the early detection of defects and reducing production issues
- Expanded test cases using data analysis to improve coverage and ensure robust application performance

PROJECTS

- **Full Stack Spot Checker (*FastAPI, React, AWS*)**
 - Designed and implemented a full-stack web application for eatery inspections using FastAPI (backend) and React (frontend)
 - Built authentication, observation logging, and data retrieval APIs to streamline inspection processes
- **Portfolio Website (*React, GitHub Pages*)**
 - Developed a personal portfolio showcasing projects, skills, and achievements using React and deployed on GitHub
- **Anime Quote API (*FastAPI, AWS Lambda*)**
 - Created a RESTful API serving randomized anime quotes, deployed on AWS Lambda.

EDUCATION

National University of Singapore

FEB 2019 – FEB 2020

- Graduate Diploma in Systems Analysis

University of London

AUG 2015 – JUN 2018

- Bachelor of Science (Honours) Business and Management

SKILLS

- **Programming & Web Development:** Python, FastAPI, Django, JavaScript, Node.js, Express, React, HTML, CSS
- **Cloud & Infrastructure:** AWS, Azure, Terraform, Docker, ECS, CI/CD
- **Databases & Observability:** PostgreSQL, MySQL, DynamoDB, Elasticsearch
- **Security & Best Practices:** IAM, API Security, OAuth2, JWT, Cloud Compliance

CERTIFICATION

- AWS Certified Solutions Architect - Professional
- AWS Certified Database - Specialty
- AWS Certified Data Analytics - Specialty
- AWS Certified Developer - Associate (DVA)
- HashiCorp Certified: Terraform Associate (003)