

# Do Duy Thanh

## **Backend Software Engineer**

Mobile: (+84) 395 724 546 Email: <a href="mailto:duythanh1602@gmail.com">duythanh1602@gmail.com</a> Location: Vietnam | Languages: English (Proficient), Vietnamese (Native)

#### **SKILL AND EXPERTISE SUMMARY**

IT Domain Knowledge: Al Safety Platform, Booking System, Mobile communication System, Security Platform.

#### **Software & Tools:**

- Programming Languages: Typescript, Javascript, Python.
- Frameworks/Environment: Node.js, ExpressJS, NestJS.
- Database: MySQL, MongoDB, Redis, Postgres.
- Cloud Service: AWS.
- Communication technologies: Restful API, Grpc, MQTT, RabbitMQ, Kafka.
- Containerization and Orchestration: Docker
- Version Control and Collaboration: Git, Bitbucket, JIRA.
- Testing Frameworks: Jest, Jasmine.
- Architectural Patterns: Microservices, Monolith.

Languages: TOEIC L&R: 875/990. Good command of spoken and written English.

#### **EMPLOYMENT HISTORY AND PROJECTS INVOLVED**

## **TMA Technology Group, Vietnam**

**BACK END SOFTWARE ENGINEER** 

Jan 2022 - Aug 2024

# Project Overview: Al Technologies - Safety Platform Integration with Al/ML

April 2023 – Aug 2024

- Dedicated to Australia Clients as a Backend Server developer, work closely with project stakeholders and relative team to involving in building an Android application that integrates with AI Technologies and Machine Learning, covering the entire process from requirements to go-live.
- The project scope involves integrating tools like AI Technologies into workflows to classify user intent, fine-tune documents, and generate responses from ChatGPT, activate emergency services. It also includes incorporating emergency services and internal notifications.

### Key responsibilities:

- Architected and optimized database structures for robust, high-performance back-end servers, ensuring scalability and maintainability.
- Played a pivotal role in architectural decision-making, contributing to process improvements and long-term technical strategy for backend systems.
- Applied Test-Driven Development (TDD) practices, writing comprehensive unit and integration tests to guarantee backend reliability and minimize production issues.
- Directed advanced SQL data management and storage strategies, leveraging deep expertise to design
  and optimize complex database systems. Integrated Redis caching to drastically enhance performance,
  reduce query latency, and ensure high availability for large-scale, data-intensive applications.
- Continuously analyzed system performance metrics, proactively identifying and diagnosing
  performance bottlenecks. Led the implementation of targeted optimizations, resulting in significant
  improvements in efficiency, scalability, and overall system stability.
- Engineered and optimized worker processes to efficiently handle background tasks, ensuring enhanced system performance, reliability, and scalability. Implemented best practices to streamline task execution, minimizing downtime and resource consumption.

Client Australia

**Project size** 30 members using Scrum/Agile Methodology

Role Taken Backend developer

**Technology Stack** Nodejs, ExpressJs, NestJs, MySQL, Redis, Microservices, Al/ML, ChatGPT, AWS, event-driven

Kafka, Prometheus, Grafana, Figma, JIRA, Confluence, Postman, gRPC, Restful API

#### **Project Overview: Isolation platform**

Jun 2022 - April 2023

- This project aims to develop a highly secure, isolated platform designed to rigorously enforce permissions and
  policies across various services.
- The platform will ensure that all access points adhere to stringent security protocols, safeguarding user data and system integrity.
- By validating permissions in real-time and continually monitoring policy compliance, the system will provide a
  robust framework for protecting sensitive information, preventing unauthorized access, and maintaining overall
  security.

## Key responsibilities:

- Use containerization or virtualization to further isolate services, reducing the attack surface and improving system security.
- Troubleshot and resolved customer-reported bugs by replicating issues in AWS instances, enabling accurate diagnosis and effective problem resolution.
- Actively collaborated with front-end, DevOps, and QA teams to ensure seamless integration across the entire
  development lifecycle. Facilitated communication to align technical and business goals, driving more cohesive
  and efficient project outcomes.
- Architected and developed a secure, isolated platform to enforce permissions and policies across various services, ensuring compliance with stringent security protocols.
- Designed and implemented real-time permission validation mechanisms to dynamically control access, preventing unauthorized interactions with sensitive resources.
- Conducted performance and security testing, proactively identifying bottlenecks and vulnerabilities to enhance platform efficiency and security.

Client United States
Role Taken Backend developer

**Technology Stack** Nodejs, ExpressJs, MySQL, Postgres, Redis, Microservices, AWS, Prometheus, Grafana,

Figma, JIRA, Confluence, Postman.

### **Project Overview: Internship Booking Interview System**

Jan 2022 – Jun 2022

- HR personnel upload candidate resumes in PDF format, which are automatically scanned and stored in a structured database for easy retrieval.
- Managers can apply advanced skill-based filters to efficiently search and shortlist candidates that match specific criteria.
- The system facilitates seamless interview scheduling, allowing managers to book interviews directly through the platform.
- Managers receive automated weekly email updates with a curated list of candidates based on their subscribed skill preferences, ensuring they remain informed of top talent.

#### **Key responsibilities:**

- Developed the automated resume scanning and storage system, enabling HR personnel to upload PDF resumes that are systematically parsed and saved in a structured database for efficient retrieval.
- Designed and implemented advanced skill-based filtering algorithms, allowing managers to search and shortlist candidates based on specific skill sets, streamlining the hiring process.
- Built the interview scheduling module, ensuring managers can seamlessly book interviews with shortlisted candidates through the platform.
- Collaborated with cross-functional teams to ensure integration between the resume scanning, filtering, and interview scheduling functionalities.
- Optimized database queries to handle large volumes of candidate data while maintaining high performance and reliability.
- Developed and implemented an automated email notification system, providing managers with tailored candidate lists based on their subscribed skill preferences, ensuring they stay updated on relevant talent.

ClientInternal HR departmentRole TakenBackend developer

Technology Stack Nodejs, ExpressJs, MongoDB, Redis, On-Premise, Trello, Github, Git.

#### **CERTIFICATIONS**

# **EDUCATION**

Ho Chi Minh University Of Techology Bachelor's degree of Mechatronics GPA: 3.0/4.0

2015 - 2019