EDWARD DUONG

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FULLSTACK SOFTWARE ENGINEER

Full-stack software engineer with 9 years of experience in designing, architecting, and developing secure, scalable, and maintainable solutions across industries like Logistics, Food, and Healthcare. Expertise in event-driven microservices, hexagonal and layered architectures, TDD, and CI/CD pipelines for seamless deployments. Skilled in infrastructure as code (Terraform) and cloud-native development using AWS (S3, EC2, ECR, ECS Fargate, DynamoDB), Docker, and AI platforms like Vertex AI, OpenAI, and PaLM. Proficient in JavaScript/TypeScript, Java, and Python.

SOLID • Containerization • Project Management • System Design and Security • Systems Integration CI/CD • Infrastructure provision and deployment • Cloud Computing • Database Design

Languages: JavaScript, TypeScript, Java, Python Web: HTML, CSS, ReactJS, Tailwind CSS Web Services: RESTful API, GraphQL, SocketIO, Server-sent events, JSON Web/App Servers: NginX, AWS, GCP Frameworks: Spring Boot, NextJs, ExpressJS, Serverless, FastAPI Databases: MySQL, PostgreSQL, MongoDB Design Patterns: Factory, Singleton, Prototype, Builder, Adapter, Decorator, Observer, State SDLC: Scrum, Kanban, Agile, Waterfall Tools: VS Code, IntelliJ, Docker, Git, Github, Jira, Confluence, Bitbucket, Slack, NPM, PDM, YARN Platforms: Linux, MacOS, Windows, Amazon Web Services, Google Cloud Platform Application/Software: Pubnub, Zendesk

PROFESSIONAL EXPERIENCE

CAREER NOTE: Completed on-campus studies and currently taking distance education courses to complete a **Master's Degree in Computer Science** (Available for full-time, W-2 employment).

DOCTOR ANYWHERE, Ho Chi Minh, Vietnam • 05/2022 - 06/2024

Healthcare startup in Singapore.

Senior Full Stack Software Engineer

Supported customer service systems and system innovation with AI.

- Architected and built the backend with Java Spring, utilizing Amazon ECR and Amazon ECS Fargate to ensure performance and scalability, achieving up to an 80% improvement compared to manually managed servers.
- Secured communication with the front-end using HTTPS and JSON Web Token (JWT), and accelerated integration with Swagger; protected backend sensitive information using AWS Secrets Manager.
- Automated infrastructure provisioning with Terraform and streamlined the development lifecycle using Bitbucket Pipelines and Jenkins, speeding up the product delivery process by 90%.
- Conducted end-to-end (E2E) testing using Selenium WebDriver to identify potential issues and ensure software quality.
- Implemented GCP Document AI to automate appointments, improving efficiency by 60%, and integrated GCP Vertex AI with Telegram to develop a chatbot, expanding customer reach.
- Led the adoption of Gemini and OpenAI to automate email, chat, and PDF processing for customer details, streamlining appointment creation with symptom data and reducing processing time by ~40%.

<u>Technologies Used:</u> Java, JavaScript / Typescript, Python, Spring Boot, Node, NextJs, ReactJs, Tailwind CSS, MySQL, DynamoDB, Docker, Terraform, Bitbucket Pipeline, Jenkins Pipeline, AWS ECR/ECS, GCP Dialogflow, GCP Document AI, GCP Vertex AI

AS WHITE VIETNAM, Ho Chi Minh, Vietnam • 12/2021 – 05/2022

A healthcare startup.

Full Stack Software Engineer

Supported building dashboards for healthcare systems.

• Built and maintained web applications using HTML, CSS, JavaScript, React, and Serverless frameworks, deploying on AWS Lambda to reduce server maintenance costs.

- Leveraged the power of GraphQL to extract necessary information from the backend, optimizing the request payload by up to 90%.
- Optimized database queries and frontend loading mechanism to improve the performance by 3 times.
- Created custom data visualizations using Chart.js and Ag-Grid to provide user-friendly insights and analysis.
- Ensured responsive designs across various devices and screen sizes to enhance the customer's mobile/tablet experience.

<u>Technologies Used:</u> JavaScript / Typescript, Node, Nextjs, ReactJs, Tailwind CSS, Serverless framework, Apollo GraphQL, AWS Redshift, AWS Lambda, Bitbucket Pipeline.

RICH PRODUCTS VIETNAM, Ho Chi Minh, Vietnam • 09/2018 - 10/2021

A subsidiary of global Rich Products Corporation headquarter is in Buffalo, New York, United States.

Full Stack Software Engineer & Mobile Engineer

Supported a learning management system, e-commerce, in-house human resource mobile application, door tracking service.

- Managed and enhanced the legacy Moodle LMS, reducing costs and implementing new features, while documenting processes to improve team knowledge.
- Visualized data interactively using Chart.js and integrated Socket.io, enabling administrators to easily track associates' manufacturing travel by 100%.
- Leveraged the ease of use of Node.js and Express.js, along with the flexibility of MongoDB, to build a system that doubled deployment speed and maintenance efficiency.
- Led mobile application development to strengthen company engagement and disseminate rules, compliance guidelines, and instructions, resulting in increased associates' knowledge of compliance.
- Delivered full-stack applications using HTML, CSS, JavaScript, and React, leveraging Azure infrastructure to ensure compatibility with the company's legacy network.
- Collaborated with cross-functional teams to gather requirements and design scalable solutions for complex business problems, driving end-to-end sales growth.

<u>Technologies Used:</u> JavaScript, PHP, Node, ExpressJs, SocketIO, HTML, CSS, ReactJs, Moodle, Magento, Flutter, MariaDB, MongoDB.

DOU NETWORK (CYBERLOGITEC), Ho Chi Minh, Vietnam • 09/2015 – 09/2018

Outsourcing company.

Software Engineer

Supported transportation and warehouse services.

- Developed robust full-stack web applications using React, Angular, and the Spring framework to deliver secure and reliable systems to customers while keeping maintenance within acceptable limits.
- Utilized D3.js, Chart.js, and Three.js for advanced data visualizations to present complex information, enhancing users' ability to manage Container terminal.

• Migrated legacy systems to modern frameworks, eliminating vulnerabilities while maintaining operational continuity. <u>Technologies Used:</u> JavaScript, Java, Spring, Spring Boot, ReactJs, AngularJs (1.6), Three.js, Jquery, HTML, CSS, MSSQL, PostgreSQL, Oracle.

ACADEMIC PROJECTS

Maharishi International University (2025)

Health Buddy: This project develops a specialist assistant AI for quick healthcare support, where users assess symptoms via text (optional audio/health data) and receive advice, calming suggestions, and clinic recommendations. Utilized JavaScript, Express.js, React.js, OpenAI.

EDUCATION

Master of Science in Computer Science

(In progress via distance education; expected completion 04/2027)

Maharishi International University, Fairfield, Iowa

Key Courses: Web Applications - Architecture and Frameworks, Modern Web Applications, Cloud Computing, Algorithms

Bachelor's Degree in Information Technology

Ho Chi Minh City University of Foreign Languages and Information Technology, Ho Chi Minh, Ho Chi Minh (09/2015)