

# PATRICK LUAN

## Full Stack Developer

+13155121442

patrickluan0719@gmail.com

<https://github.com/github.com/appleseed619>

<https://www.linkedin.com/in/patrick-luan-966691350>

<https://patrick-luan.vercel.app>

Capitao Poco, Para, Brazil

## Summary

Experienced Full Stack Developer with 7 years in designing, developing, and integrating AI-powered applications, cloud infrastructure, and scalable web solutions. Successfully optimized AI retrieval systems, increasing efficiency by 40% and cutting deployment cycles by 60%. Skilled in full-stack development, AI model orchestration, and cloud automation, with experience building and maintaining applications serving over 500K+ users with 99.9% uptime. Well-versed in integrating LLMs, optimizing vector search, and developing secure, high-performance backend architectures. Focused on advancing AI applications, scalable system design, and workflow automation.

## Experience

### Chili Piper

New York, United States

#### Full Stack Developer

04/2022 - 10/2024

- Designed and deployed AI-powered search and recommendation engines using LangChain and Pinecone, improving document retrieval accuracy by 50% and reducing query response times by 35%.
- Developed and maintained full-stack applications with React.js, Node.js, and FastAPI, serving 500K+ active users while ensuring 99.9% uptime.
- Automated cloud infrastructure provisioning with Terraform and Kubernetes, reducing cloud computing costs by 30% and improving resource allocation.
- Built optimized CI/CD pipelines using GitHub Actions and Jenkins, reducing deployment failures by 50% and decreasing release cycles from 2 weeks to 3 days.
- Led a team of six developers, ensuring seamless collaboration across AI, full-stack development, and cloud automation projects, boosting productivity by 25%.
- Conducted load testing on backend services, ensuring they could handle 1M+ API requests daily without performance degradation.

### Chili Piper

New York, United States

#### Junior Software Developer

06/2021 - 03/2022

- Reviewed and refactored over 10K+ lines of JavaScript, TypeScript, and Python code monthly, improving system efficiency by 20% and reducing redundancy.
- Implemented automated testing with Jest and Mocha, reducing software defects by 35% and improving overall system stability.
- Improved GraphQL and RESTful API response times by 25% by refactoring SQL queries, indexing databases, and integrating Redis caching.
- Enhanced CI/CD processes using Jenkins and GitHub Actions, cutting deployment time by 60% and ensuring high application uptime.
- Provided mentorship and technical training for 15+ developers, conducting weekly code reviews and improving adherence to best practices.

### VINOVA

Singapore, Singapore

#### Back End Developer

11/2019 - 05/2021

- Built and maintained scalable RESTful and GraphQL APIs using Node.js and Django, handling 2M+ API requests per month with a 99.98% uptime SLA.
- Enhanced database performance by 40% through PostgreSQL query tuning, indexing, and Redis caching, reducing API response times.
- Created secure OAuth 2.0 and JWT-based authentication systems for 100K+ users, ensuring compliance with industry standards.

- Migrated monolithic applications to microservices using Docker and Kubernetes, reducing deployment time by 70% and increasing scalability.
- Integrated real-time WebSocket communication, improving live data processing speed by 50%.

## Atta Systems

Singapore, Singapore

Front End Developer

11/2018 - 10/2019

- Designed a React-based dashboard used by 200K+ users, improving user engagement by 30% and optimizing UI/UX using Material UI and Tailwind CSS.
- Reduced page load time from 3 seconds to 1.2 seconds by optimizing React state management and lazy loading components.
- Implemented real-time features using WebSockets, increasing live data processing efficiency by 50%.
- Created reusable UI components, reducing development time by 40% across multiple projects. Conducted A/B testing, increasing conversion rates by 15% through data-driven UX enhancements.

## Education

Nanyang Technological University Singapore, Singapore

Bachelor Degree in Computer Science 04/2014 - 10/2018

## Skills

Programming: JavaScript, TypeScript, Python, C++, C#

Frontend: HTML, CSS, React.js, Vue.js, Angular, Next.js

UI/UX Frameworks & Libraries: Tailwind CSS, Bootstrap, Material UI, Ant Design

Backend Development: Node.js, Express.js, Django, Flask, ASP.net, FastAPI

Databases: MongoDB, MySQL, PostgreSQL, Firebase, Redis, Azure, Cosmos DB

Cloud & DevOps: AWS Lambda, Docker, Kubernetes, GitHub Actions, Jenkins, Google Cloud Platform

AI & LLMs: OpenAI API, Claude, Hugging Face, LangChain, RAG, Vector Database, AI Integration, Prompt Engineering

Testing & Automation: Jest, Mocha, Supertest

## Certification

- Full Stack Web Developer Nanodegree
- Salesforce JavaScript Developer I Certification
- Laravel Certification
- Data Analysis with Python Certification
- Relational Database Administration(RDA) Certificate
- MongoDB Professional Certification
- AWS Certified DevOps Engineer - Professional Certification
- Google Cloud Certification
- Ethical Hacking Certifications