HUYNH NGUYEN THANH - Backend Engineer

Professional Summary

Backend Engineer with 4+ years of experience designing, building, and deploying robust, scalable systems using Python, Django, FastAPI, PostgreSQL, and AWS. Expertise in clean architecture, cloud-native deployments, and system optimization. Committed to delivering excellence and solving complex engineering challenges effectively.

Experience

Freelance Backend Developer & CS Student

Remote | April 2025 - Present

- Developing and maintaining backend solutions for personal and freelance projects in chatbot automation.
- Built a robust Course Management System with Django & SQLite: implemented authentication, course CRUD, analytics dashboard; automated deployment via CI/CD (GitHub Actions) and Docker. https://github.com/brianhuynh2021/course-web-app-be
- Created an AI Chatbot for repair services using FastAPI and FAISS for vector search (embeddings-based retrieval), with WebSocket communication for real-time interaction. https://github.com/brianhuynh2021/repairmen_chatbot
- Solved 50+ LeetCode problems in Python to strengthen Data Structures & Algorithms skills. https://github.com/brianhuvnh2021/python_leetcode
- Currently pursuing a Bachelor's in Software Engineering at UIT-VNU-HCM, focusing on backend systems and distributed computing.

Python Backend Developer

Bstar Solutions | Mar 2024 - March 2025

- Built scalable RESTful APIs using FastAPI, PostgreSQL, and Milvus to support advanced AI chatbot systems.
- Significantly optimized WebSocket chatbot performance, achieving a 40% reduction in latency.
- Managed deployment on AWS (S3, API Gateway), integrated automated alerting via Telegram Bot.

Python Developer

Datafluct (Remote, Japan) | Sept 2022 - Feb 2024

 Improved performance of Django APIs through strategic PostgreSQL query optimization and indexing. Migrated and optimized backend services to AWS/GCP, enhancing system reliability and reducing operational costs.

Python Developer

FPT Software | Oct 2020 – Aug 2022

- Engineered RESTful and GraphQL APIs using Django, FastAPI, Flask for a healthcare management platform.
- Implemented AWS CloudFormation to streamline deployment processes and minimize system downtime during updates.

Customer Support & Operations Specialist | 2014 – 2020

Worked at various companies including Emerio, Teleperformance, Officience and others in Malaysia and Vietnam

- Delivered technical support to enterprise customers.
- Achieved high customer satisfaction ratings and met SLA targets.

Technical Skills

- Languages: Python (Django, FastAPI, Flask), SQL, others: JavaScript (Vue.js, Next.js).
- Databases: PostgreSQL, MySQL, Redis, SQLite, Milvus.
- Cloud & DevOps: AWS (S3, API Gateway), GCP, Docker.
- Tools: Pydantic, SQLAlchemy, Alembic, VSCode.
- CI & Testing: GitHub Actions.

Education

- Diploma of Computer Science University of Science, College of IT & Engineering (Sep 2010 - Oct 2013)
- Bachelor's in Software Engineering (Ongoing) UIT–VNU-HCM (Apr 2024 Present);
 Balancing full-time work and studies focused on backend systems and distributed computing.

Additional Skills

- Fluent in English (written & verbal)
- Exceptional analytical, problem-solving, and teamwork skills
- Continuous learner passionate about technology and innovation