

Software Engineer

NGUYỄN ĐỨC MẠNH

November 28th, 1998, based in Hanoi, Vietnam

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Talents

Senior Software Engineer with over 7 years of experience in web development, specializing in both front-end and full-stack solutions. Proven expertise in designing, developing, and optimizing applications to enhance user experience and drive business objectives. Skilled in building scalable and maintainable systems, with a strong command of system architecture and cross-service communication. Proficient in SQL and NoSQL databases, with experience optimizing data structures and queries for high performance and availability. Hands-on experience with containerization and orchestration using Docker and Kubernetes, ensuring application scalability and simplified deployments; operating high load systems, ensuring high availability, reliability, and efficient deployment workflows.

Experience

06/2025 - NOW

MobiFone Solutions, Hanoi - Technical Leader

MobiFone Solutions, as a part of MobiFone Group, takes responsibility to design and build various Digital Government solutions in Vietnam.

As a Technical Leader, I was responsible for the end-to-end delivery of complex digital government projects. My key responsibilities and achievements included:

Product Architecture and Design: Designed and architected robust and scalable product solutions for high-stakes digital government initiatives, ensuring alignment with client requirements and national standards. Conducted in-depth analysis of existing systems and client-specific business processes to inform strategic architectural decisions.

Stakeholder and Project Management: Facilitated and led high-level meetings to align project goals and consolidate information among cross-functional teams, including clients, product owners, and engineering teams. Developed comprehensive project plans and managed resource allocation, ensuring on-time delivery within scope and budget.

Team Leadership and Development: Coordinated and mentored a team of developers, fostering a collaborative and high-performance environment. Led the development process from inception to deployment, ensuring adherence to best practices, coding standards, and project timelines.

Technical Implementation: Actively contributed to the development of core product features, focusing on critical modules that required advanced technical expertise. Troubleshoot and

resolved complex technical challenges, guaranteeing the stability and reliability of the final product.

05/2024 - 06/2025

VinFast, Hanoi - Senior Software Engineer

VinFast, recognized as the best-selling car brand in Vietnam as of November 2024, was where I worked as a Senior Software Engineer, taking on both technical responsibilities and lead roles in several key projects.

Green Future (formerly FGF) - Software Developer - 2024 - 2025

Language: **NodeJS - Typescript/Javascript, Golang**

Framework: **NestJS, Golang HTTP, NextJS**

Infrastructure: AWS, EKS, EC2 VM, RDS MySQL, Elasticache Redis, etc.

Developed and maintained applications, infrastructure for Green Future, Vietnam's largest car rental service. I designed and built scalable, reliable infrastructure to support rapid business growth, improving application performance and reliability through ongoing monitoring, optimization, and automation.

In a fast-changing environment, I adapted quickly to align technical solutions with new priorities and requirements. **Rebuilt and refactored the system from scratch** in about two months, keeping new business features running while delivering high-performance, scalable, and extensible infrastructure.

Internal portal - Software Developer - 2024 - 2025

At VinFast, contributed to the digital transformation of various business units by developing multiple internal portals and applications tailored to a complex, role-driven business ecosystem. These systems facilitated communication, collaboration, and workflow management among internal teams, external vendors, and strategic partners. I worked closely with stakeholders—including business leaders, department heads, and end users—to gather requirements, define product scope, and ensure delivered solutions aligned with evolving business needs.

08/2020 - 05/2024

EMDDI JSC, Hanoi - Full-stack Engineer

EMDDI is a rail-hailing platform based in Vietnam, built by engineers and scientists from Vietnam National University, Hanoi. We powered taxi, rail-hailing and other services for Taxi Viet Union (Liên Minh Taxi Việt), including over 200 taxi companies and hundred thousand vehicles. Some projects that I contributed to there:

GSM Xanh SM Platform - Backend Leader - 2023 - 2024

I proudly developed, maintained the XanhSM platform, a ride-hailing app backed by Vingroup and GSM, serving over a million trips each day, with three main services (Taxi, Escooter, Delivery), as the Backend Leader role.

Language: **NodeJS - Typescript/Javascript**

Framework: **NestJS, ExpressJS, Fastify - Socket.io**

Infrastructure: AWS, EKS, EC2 VM, RDS MySQL, Elasticache Redis, etc.

Developed server-side microservices for the XanhSM system, supporting four core applications: Customer, Driver, Admin, and Business Client. Achieved performance targets of 1 million TPM with P99 latency under 800ms, and maintained 99.99% system uptime.

Designed software architecture and system components for approximately 20 backend microservices. Ensured seamless integration between services and client-side applications via REST APIs, message brokers, RPC, queues, and other communication protocols.

Collaborated with GSM, VinFast, EMDDI Board of Directors, and external stakeholders to deliver new features on tight schedules. Actively participated in all phases of the product development lifecycle and provided cross-functional support to PO, BA, QC, and Ops teams.

Led the backend team's workflow management. Responsible for task breakdown, assignment, and coordination. Acted as the main point of contact for inter-team communication, addressed inquiries, and took ownership of the backend team's deliverables and performance.

EMDDI for Business - Full-stack Engineer - 2021 - 2024

Language: **NodeJS - Typescript/Javascript**. Framework: **ExpressJS - ReactJS**

EMDDI for Business is the enterprise solution for business in transportation. We provide business billing for our services: Taxi app, airports trips and other services in the ecosystem in the future

Build the admin web applications for the business billing solutions, including 2 sides: EMDDI admin and business customer admin. Took full ownership of both frontend and backend development, as well as the overall system architecture and solution design, ensuring scalability, security, and usability. Delivered a comprehensive billing platform that allows businesses to monitor usage, manage transactions, and handle invoicing with accuracy and transparency.

EMDDI Ridehailing - Full-stack Engineer - 2021 - 2024

Language: **NodeJS - Typescript/Javascript, Golang**. Framework: **ExpressJS, ReactJS, Gin**

Took primary responsibility for building and operating the backend system for customer-facing applications, ensuring performance, reliability, and scalability. Developed the customer web app for EMDDI, enabling seamless integration with third-party platforms such as VNPAY, Viettel Pay, and others. Ensured secure, reliable, and low-latency API communication between systems, supporting real-time trip dispatching and high user satisfaction.

02/2019 - 08/2020

Foobla Vietnam, Hanoi - Full-stack Developer

Foobla Vietnam is a technology company based in Hanoi. They ran Merchize, an online POD/Dropshipping platform for sellers and customers.

Worked as a full-stack engineer, contributing to nearly all aspects of the platform. Developed customer-facing shopping cart experiences and seller back-office management tools using ReactJS/NextJS on the frontend and NodeJS on the backend. Built a specialized tool to convert seller artworks into printable products by processing digital images into product prototypes, supporting a streamlined print-on-demand workflow.

06/2018 - 02/2019

Admeta - *Front-end Fresher*

Built a frontend web application for managing marketing campaigns using ReactJS, enabling marketing teams to easily create, schedule, and monitor campaigns across multiple channels.

Also developed several lightweight mini web campaigns as HTML static pages, optimized for performance, fast load times, and seamless integration with landing pages or partner platforms.

02/2018 - 06/2018

TCOM - *Full-stack Intern*

Develop the outsource products for the Japanese market. I mainly worked on an online teaching-learning website, mostly in the teachers' app.

Education

Jul 2016 - Jul 2021

VNU University of Engineer (ĐH Công nghệ) - *Bachelor in Computer Science*

Hobby

Passionate about Free/Libre and Open Source Software (FLOSS) and GNU/Linux, I believe open-source software drives innovation and forms the backbone of the internet. Committed to promoting privacy and freedom online, I actively research privacy solutions for personal use, fostering a security-focused mindset that enhances the robustness and integrity of my software development work.

I am deeply invested in automating workflows and integrating AI to optimize development processes, leveraging tools to streamline repetitive tasks and boost efficiency. By experimenting with AI-driven solutions, such as code completion, coding assistant tools like Windsurf and automated testing frameworks, I enhance productivity and elevate the development experience for both myself and my team, ensuring scalable and innovative outcomes.