

Nguyen Hoang Hung (John Nguyen)

Senior Fullstack Developer

Personal Details

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- My website: <https://bettafish15.github.io>

PROFILE SUMMARY

- Over 6+ years of experience working as a back-end developer on the Node.js platform
- Experience in working as a frontend developer with ReactJS, adept at creating interactive and engaging user interfaces using React, Javascript, and CSS
- Experience in working with asynchronous processing model using queue such as SQS, Kafka, RabbitMQ, BullQueue Redis
- Used to work with serverless computing model using AWS Lambda
- High understanding with both Monolithic and Microservices architecture
- Love to learn and apply Design Patterns to make well-structured codebase
- Good Security mindset, always searching for best practices to make code and system meet security standard.

EDUCATION BACKGROUND

- Bachelor of Information Security and Insurance at FPT University

LANGUAGE SKILLS

- **English:** Professional
- **Vietnamese:** Native

TECHNICAL STACKS

- **Programming Language:** HTML, CSS, JavaScript, TypeScript
- **Framework:** NestJS, ExpressJS, Fastify, React/Redux, Angular, VueJS
- **Database Management System:** PostgreSQL, MongoDB
- **Queue Services:** SQS, Kafka, RabbitMQ, Redis
- **Infrastructure/Tools:** Github, Kubernetes, K9s, AWS, Kafka, Terraform, CloudFormation, Github Action, Docker, Docker-Compose, Postman, Jira, S3
- **Version Control Management:** Git
- **RestApi/Swagger, GraphQL, Redux, MobX, Storybook, msw, SQS, Kafka, RabbitMQ, BullQueue Redis**

PROFESSIONAL EXPERIENCE

March 2024 – Now

Fullstack Software Engineer

Webhouse

- **Traveo (Inhouse product)**

Description: Architected, developed and launched a scalable B2B SaaS platform for airline ticket booking management using microservices and event-driven architecture, enabling travel agencies to operate custom-branded booking websites with individual subdomains

Team size: 3

Role: Fullstack Lead / Solution Architect

Responsibilities:

- Implemented a multi-tenant architecture supporting white-label solutions with customizable UI configurations for each travel agency
- Implemented repository pattern with adapter interfaces enabling seamless integration of multiple flight providers (Amadeus, Sabre) and payment gateways (Stripe, Chargebee), allowing easy provider switching without affecting core business logic
- Designed microservices architecture using CQRS pattern, separating booking commands and queries for optimal scalability and performance
- Built event-driven system handling complex booking workflows across services (reservation, payment, confirmation) with guaranteed message delivery

- Engineered dynamic subdomain routing system for agency-specific branded portals
- Created pluggable payment processing system allowing agencies to choose and configure preferred payment providers
- Established robust CI/CD pipeline using GitHub Actions with automated testing and deployment stages
- Implemented infrastructure as code using AWS CloudFormation for consistent environment provisioning
- Created comprehensive monitoring system with Slack integration for deployment notifications and error alerts

Technologies: NodeJS, Swagger, JWT, PostgreSQL, Amazon Web Services, Kafka, ELB, RDS, Cloudfront, Amplify, CloudFormation

- **Custom CRM - (Search Property Client)**

Description: Developed a specialized CRM platform for an Australian property investment agency, streamlining their high-value property investment operations and client management workflows

Team size: 3

Role: Solution Architect, Lead Fullstack Developer, Lead DevOps

Responsibilities:

- Engineered an investment planning module with dynamic financial modeling capabilities, generating data-driven visualizations based on proprietary investment formulas, with secure public link sharing for client portfolio access
- Implemented comprehensive pipeline management system tracking client journey stages (initial contact, advisory, planning) with automated activity logging and task management
- Built digital contract signing workflow using PDFLib/SignPDF, enabling seamless generation and processing of investment proposals and legal documents
- Created multi-user system with role-based access control, supporting internal staff, external clients, and administrators with differentiated permissions and views
- Designed activity tracking system capturing all client interactions and internal workflows, ensuring compliance and maintaining detailed audit trails
- Developed task management system with automated assignments and deadline tracking, improving team productivity and client response times

- Established automated CI/CD workflow using GitHub Actions for reliable deployment across environments
- Implemented infrastructure as code using AWS CloudFormation for consistent resource provisioning
- Created real-time error monitoring and alerting system integrated with Slack for immediate team notifications

Technologies: NestJS, Swagger, JWT, Postgre, ElasticBeanstalk, Amplify, RDS, Cloudfront, ALB

March 2021 - March 2024

FPT Software

Fullstack Software Engineer

- **Mental Healthcare Platform (Cerebral)**

Description: Led architectural transformation and development of critical healthcare microservices at Cerebral, a major US telehealth platform.

Team size: 7

Role: Full-stack Developer - Team Lead

Responsibilities:

- Architected and implemented microservices migration strategy from monolithic Ruby on Rails to NestJS microservices using NX monorepo, gradually transforming the monolith into a lightweight API Gateway
- Designed resilient prescription management system integrating with DoseSpot, implementing event-driven architecture with BullQueue to handle high-latency third-party operations while maintaining system responsiveness
- Engineered complete prescription lifecycle workflow: medicine search (with caching), prescription creation, pharmacy confirmation, payment processing, and delivery tracking
- Implemented GitOps practices using Flux for Kubernetes deployments, with Helm charts and Istio service mesh for enhanced observability and traffic management
- Built and maintained payment processing microservices handling Stripe/Chargebee integrations for subscription management
- Managed infrastructure as code using Terraform, including deployment pipelines and resource provisioning

- Created fault-tolerant system architecture ensuring continuous operation despite external service constraints
- Developed caching strategies and queue-based workflows to optimize system performance and reliability

Technologies: NodeJS, NestJS, Kubernetes, K9s, Datadog, Github, Docker, React, React Router, Styled-Component, Redux, Redux-Saga, Story Book, React Testing Library, Cypress, Micro Front-end, Prisma, Nx, Ruby on Rails, Microservice, Apache Kafka, Event-driven patterns, Stripe, Twilio, Chargebee, Helm Charts, SQS, RDS, Lambda, GraphQL

September 2019 – March 2021

Fullstack Software Engineer

VCCorp - Social network (Lotus)

- **Encryption module**

Description: Encryption module which will encrypt data that being encrypted in database and redis

Team size: 1

Role: Back-end Developer

Responsibilities: Write AES encryption module in C language and import into NodeJS using C addons with Node-API instead of using rijndael-js package

- Improve performance of encryption logic by 70% (120ms to 35ms by benchmarking)

Technologies: NodeJS, C, Node-API

- **System monitoring**

Description: Created a custom service that monitors/commands different NodeJS services using pm2.

Team size: 1

Role: Full-stack Developer

Responsibilities: Create a system that monitor and control servers using PM2 and Redis.
Create admin template using core-ui for admin to monitor and check on servers

Technologies: NodeJS, Swagger, JWT, Postgre, Redis, Amazon Web Service, pm2,
MongoDB, ElasticSearch

September 2018 – September 2019

Fullstack Software Engineer

FPT Telecom

- **Foxpay (Digital Wallet)**

Description: Digital Wallet Application

Team size: 12

Role: Backend Developer

Responsibilities: API Integration: Integrated the app with various banking APIs and payment gateways to facilitate real-time financial transactions.

Payment Processing: Developed and maintained the payment processing logic, ensuring accurate and efficient transaction handling.

Database Management: Managed a secure and scalable database to store user data and transaction histories.

Technologies: NodeJS, Java SpringBoot, OAuth2.0, JWT, SSL/TLS, AES Encryption,
MongoDB