Phan Quoc Bao

Software Engineer

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SUMMARY

Software Engineer (Frontend and Full Stack) with over 3 years of experience building web applications in B2B e-commerce, education, and marketing campaigns using React, Next.js, TypeScript, Node.js and NestJS. Worked end to end on features such as RFQ and contract flows, real-time chat, a multi-tenant IELTS practice platform. Recent work focuses on building maintainable and performant web applications and integrating AI into workflows where it brings clear business value.

EXPERIENCE

Software Engineer Mar 2024 – Present

Arobid - arobid.com, District 7, HCMC

- Implemented and refactored real-time chat for buyers and suppliers using SignalR and React Query. Reduced unnecessary network calls and improved perceived message delivery time by about 20 percent for active users.
- Led the development of core B2B flows (RFQ, quotation, contracts) in a Turbo micro-frontend stack, designing React/Zustand state architecture that that reduced form re-rendering by 30 percents, resulting in a smoother, faster user experience on core B2B flows.
- Built a reusable UI design system with more than 30 components, supporting responsive layouts and multiple languages.
- Integrated Payload CMS into the content workflow so marketing and product teams could manage campaign content without developer support, cutting content update time from days to hours.
- Designed and developed an internal AI chatbot system to automate operational workflows, reducing manual workload for OPS and Customer Support teams.
- Technologies used: React.js, Next.js, Zustand, React Query, Tailwind CSS, .NET, MongoDB, and related frontend infrastructure tools.

Software Engineer (Part-time, Remote)

Aug 2023 – Dec 2024

ClassMate - classmate-vuive.com, Remote

- Developed a multi-tenant IELTS practice platform using Next.js, Firebase and OpenAI API, supporting more than 10 instructors. Designed tenant-aware data structures in Firestore to keep data isolated for each instructor and class.
- Led end to end delivery for Elanglab and a confidential edtech client. Worked with the instructor to clarify requirements, plan releases and prioritize features, keeping defect rates low and delivery on schedule.
- Optimized Firebase and OpenAI usage by refactoring data schema and prompts and adding validation with Zod. Reduced combined AI and database cost by 43 percents while maintaining user satisfaction and performance.
- o Technologies used: React.js (Vite), TypeScript, Express.js, Socket.io, GraphQL, Firebase.

Frontend Engineer Dec 2022 – Mar 2024

MangoAds - mangoads.vn, District 10, HCMC

• Developed and optimized marketing and landing websites for clients such as ACB, Eximbank, and VAS using React, Next.js. Improved page load time and core web vitals to support SEO and campaign performance.

- Collaborated with designers and marketing teams in an agile process to deliver and update landing pages within campaign timelines.
- Integrated RESTful APIs with CMS for dynamic data rendering, enhancing content delivery for banking and education platforms.
- Optimized SEO and static rendering in Next.js, boosting page load speeds and search engine visibility.
- Contributed to client projects including:
 - * ACB: https://acb.com.vn/
 - * Eximbank: https://eximbank.com.vn/
 - * VAS: https://www.vas.edu.vn/

PROJECTS

Software Development for "KBank Thuong Vang" Campaign – KBank VietnamSep 2024 – Jan 2025 Role: Frontend Developer Team Size: 4 (PM/BA, BE, FE, UI/UX)

• Tech Stack: Next.js, TailwindCSS, Firebase

• Key Contributions:

- Designed and built a high-performance lucky draw system (Next.js/Firebase) that successfully supported a major national campaign, processing 15M+ data points and ensuring fast, reliable user interaction under high load.
- o Optimized data processing to execute in seconds, enhancing cost efficiency and user engagement.

Seconds – Capstone Project

Aug 2024 – Dec 2024

Role: Leader & Full-Stack Developer Team Size: 4 (1 FS, 1 FE, 2 BE)

- Tech Stack: Next.js, TailwindCSS, NestJS, TypeORM, ElasticSearch, GraphQL, PostgreSQL
- Key Contributions:
 - Designed and implemented a full stack second hand marketplace using Next.js, NestJS, PostgreSQL and ElasticSearch. Built listing, bidding and order flows to support buyers and sellers trading pre-owned items.
 - Implemented GraphQL APIs and optimized search with ElasticSearch and proper indexing to improve listing retrieval time and prepare the system for future personalization and scale.

KEY SKILLS

- Frontend: React, Next.js, TypeScript, JavaScript (ES6+), TailwindCSS, React Query, Shaden UI
- Backend/Full-Stack: Express.js, NestJS, .NET (Basic), Socket.io, GraphQL
- Databases: MongoDB, MySQL, PostgreSQL, Firebase
- Others: AI Integration (GPT-4, GPT-4 Nano), SEO Optimization, Responsive Design, API Integration, TypeORM, ElasticSearch, Agile/Scrum

EDUCATION

Bachelor of Software Engineering

Dec 2024