Quyen Chau

Full-Stack Developer · Java / Kotlin · Mobile · Microservices

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Full-stack developer with 7+ years across **Java backend** (Spring, Quarkus, Kafka, gRPC) and **mobile** (Kotlin Android, Swift iOS, Flutter), extended to NestJS microservices and React/Vue web. Shipped POS hardware integrations, PCI-scoped payment services, real-time tracking and event-driven pipelines for clients in the **USA, Australia and Vietnam**. Comfortable owning a codebase end to end: architecture, releases, crash triage and code review.

TECHNICAL SKILLS

Languages	**Java, Kotlin**, Dart, Swift, TypeScript, JavaScript
Backend	**Spring, Quarkus, Ktor**, NestJS, Node.js · microservices, gRPC, REST, Apache Kafka, MQTT, BullMQ
Mobile	**Android (MVVM, Coroutines, Dagger 2, WorkManager)**, iOS (UIKit, SwiftUI), Flutter (BLoC), React Native
Web	ReactJS, VueJS, HTML5 / CSS3
Real-time & Data	Socket.IO (Redis adapter), WebSocket, FCM · MongoDB, PostgreSQL / TimescaleDB, MySQL, Redis, SQLite
DevOps	Docker, Kubernetes, Helm, Jenkins, GitLab CI, SonarQube, Firebase Crashlytics
Integrations	PAX POSLink, Clover SDK, BLE card readers, Stripe, VNPay, Twilio Verify, Google ML Kit, Google Maps, VietMap
Practices	Clean Architecture, ADRs, unit / BLoC tests, JUnit, JMeter, Robot Framework, Scrum

EXPERIENCE

Software Engineer — Global IT Outsourcing Company

Ho Chi Minh City · 2019 – Present

Healthcare Benefits POS Terminal

09/2025 – Present

Android/iOS point-of-sale app letting pharmacy & retail staff accept closed-loop health benefit / OTC cards

CLIENT	ROLE	TEAM SIZE	PROCESS
Healthcare benefits payment provider – USA	Mobile Developer (Android & iOS)	3	Jira, Crashlytics-driven triage, Scrum

TECH STACK

Android	Kotlin/Java, MVVM, Dagger 2, Retrofit/OkHttp, Navigation + SafeArgs, Paging 3, WorkManager
iOS	Swift, UIKit, URLSession, CoreBluetooth, AVFoundation
Hardware	PAX POSLink, Clover SDK, AMP SDK, BLE i9 card reader
Firebase	Crashlytics, FCM, Remote Config

KEY ACHIEVEMENTS

- Maintained a single Android codebase across multiple POS hardware flavors (PAX, Clover, AMP, BLE card reader) and its iOS counterpart, shipping regular releases
- Owned **app stability** through Crashlytics — resolved crashes and ANRs by moving heavy work off the main thread and hardening release builds
- Kept both apps up to date with the latest Android and iOS platform requirements
- Built payment features such as **refund, void** and product management flows, keeping both apps aligned with the backend API spec
- Ensured **payment amount accuracy** (tax, rounding, multi-locale formatting) and receipt correctness
- Improved camera barcode scanning reliability on iOS

Tour Booking Platform (Tourist & Guide apps)

09/2026 – Present

Tourist app & Tour Guide app for booking and running guided tours in real time

CLIENT	ROLE	TEAM SIZE	PROCESS
Internal SaaS product – Vietnam market	Full Stack Developer (Mobile focus)	5	Phased roadmap, GitLab MR review, ADRs, Scrum

TECH STACK

Mobile	Flutter, BLoC, go_router, Dio + Retrofit, Socket.IO client, FCM, VietMap SDK, mobile_scanner, flutter_secure_storage
Backend	NestJS microservices, gRPC, BullMQ
Data / Realtime	MongoDB, Redis · Socket.IO (Redis adapter), FCM
Payment / DevOps	VNPay · Docker Compose, GitLab CI, Caddy

KEY ACHIEVEMENTS

- Designed and built a **modular Flutter SDK** (auth, booking, chat, map, notification, payment, QR) shared by the Tourist and Guide apps
- Implemented **real-time tour tracking** and turn-by-turn navigation with resilient recovery from GPS and network failures
- Ensured tour continuity across app restarts and offline conditions
- Integrated the mobile apps with NestJS microservices: OTP auth, booking flow and payment gateway
- Developed NestJS microservice features: **booking lifecycle state machine** and REST/gRPC APIs consumed by mobile and web admin
- Built a horizontally scalable **real-time location service** (Socket.IO + Redis adapter) and integrated VNPay payments with webhook handling
- Owned the mobile codebase; delivered notifications, group chat with media, reviews and localization

On-Device Card Tokenization Bridge

01/2026 – Present

Headless Android service on POS terminals exposing a local HTTP API so third-party POS software receives card tokens instead of raw card data (PCI scope reduction)

CLIENT	ROLE	TEAM SIZE	PROCESS
Healthcare benefits payment provider – USA	Android Developer (main developer)	3	Jira

TECH STACK

Android	Kotlin, Dagger 2, Coroutines / SharedFlow, Retrofit 3
Embedded server	Ktor (CIO), kotlinx.serialization
Networking	NSD (LAN discovery)
Hardware	AMP SDK, PAX POSLink

KEY ACHIEVEMENTS

- Built the service end to end as main developer: **embedded Ktor HTTP server** inside an Android Service with modular routes
- Implemented the card swipe → tokenize flow so POS clients receive tokens instead of raw card data, with secure handling of scanned data
- Added LAN discovery and connection info to simplify POS integration
- Supported multiple terminal vendors through product flavors

Benefits Member Portal App

04/2026 – Present

Cross-platform app for benefits-card members to view rewards, card, transactions and nearby stores

CLIENT	ROLE	TEAM SIZE	PROCESS
Healthcare benefits payment provider – USA	Mobile Developer (Flutter)	3	Jira

TECH STACK

Mobile	Flutter, BLoC, GetIt, Dio + Retrofit (codegen)
Architecture	Clean Architecture (layered)
Firebase	Multi-project setup (DEV / PROD)
Testing	bloc_test, mocktail, integration_test

KEY ACHIEVEMENTS

- Bootstrapped the project from scratch with **Clean Architecture + BLoC** and dependency injection
- Set up DEV/PROD environments on Android & iOS with per-environment Firebase and API configuration
- Built core screens and the networking layer with Dio interceptors (auth, logging, error mapping)
- Wrote unit, widget, BLoC and integration tests; mock repositories allow running without a backend

Driving Lesson Marketplace

2024 – 09/2026

Booking platform connecting learner drivers with driving instructors (Learner app, Instructor app, Web admin)

CLIENT	ROLE	TEAM SIZE	PROCESS
Driving education business – Australia	Full Stack Developer (Mobile focus)	5	GitLab MR review, SonarQube quality gate, Scrum

TECH STACK

Mobile	Kotlin (Android), Swift (iOS), Flutter, BLoC, GetIt, Dio + Retrofit, Google ML Kit OCR, Google Maps, Stripe, Pushy, Socket.IO, local_auth
Backend	NestJS microservices, gRPC · MongoDB, Redis · BullMQ, Socket.IO
DevOps / AI	Docker, Jenkins, GitLab CI, SonarQube · Gemini / OpenAI (lesson reports, route suggestions)

KEY ACHIEVEMENTS

- Built native **Kotlin / Swift** apps with payments, lesson routing and real-time features; published to Google Play and App Store
- Built **on-device OCR auto-fill** with Google ML Kit for Australian licence and certification cards, covered by unit tests
- Maintained 2 Flutter apps sharing a common module; restructured shared code, assets and theming
- Developed NestJS microservice features: **Stripe payments & refunds**, SMS OTP and scheduled jobs for lesson reminders and auto-cancellation
- Implemented gRPC inter-service communication and real-time chat with Socket.IO, backed by MongoDB and Redis
- Led a full visual redesign across both apps without regressions
- Shipped regular releases, improving stability and data validation

Cloud Network Management Platform

2023 – 2024

Unified cloud-based platform to configure, monitor and analyze wired & wireless networks of enterprises, hospitals and universities — thousands of devices, multi-tenant

CLIENT	ROLE	PROCESS
Enterprise networking domain	Backend & Mobile Engineer	GitLab, code review, Agile/Scrum

TECH STACK

Backend	Java, Spring Framework, gRPC, REST · Kafka, VerneMQ, ActiveMQ, Avro
Database	MongoDB, MySQL, Hibernate
Mobile	Kotlin, Java, MVVM Jetpack, Coroutines, Retrofit, SQLite, USB serial console
Web · DevOps / Test	ReactJS · Docker, Kubernetes, Helm, Jenkins, Nginx · Robot Framework, JMeter

KEY ACHIEVEMENTS

- Implemented **Java backend services with gRPC and Apache Kafka** to build event-driven, high-throughput real-time data pipelines between services
- Built **Android modules (Kotlin, MVVM + Coroutines)** to configure IoT network devices over USB serial console and MQTT, with SQLite-based configuration storage
- Delivered features for multi-tenancy, device inventory, licensing and Wi-Fi network configuration
- Maintained and enhanced the ReactJS web UI; ran performance and load testing with Robot Framework and API performance tests with JMeter; estimated features and reviewed code

Asset Tracking Platform

2022 – 2023

Real-time visibility of critical and non-critical business assets, with utilization insights (over/under-used equipment) — Web, Android and iOS

CLIENT	ROLE	TEAM SIZE	PROCESS
Asset management domain	Team Lead & Full-Stack Developer	4 (led)	Agile/Scrum

TECH STACK

Backend	Java, Spring Framework, REST · Apache Kafka, VerneMQ
Database	PostgreSQL, MongoDB
Mobile	React Native, Redux Toolkit, MapBox (heatmap), camera QR/barcode, Pushy
Web / DevOps	VueJS, ReactJS · Docker, Kubernetes, Helm, Jenkins

KEY ACHIEVEMENTS

- **Led a team of 4**: requirement analysis, solution design, task planning and code/solution review
- Built core **Spring backend services with Kafka / VerneMQ** streaming for real-time asset location and utilization analytics
- Built the **React Native app** (Android/iOS): QR/barcode device onboarding & verification, MapBox maps and heatmaps, offline mode, push notifications
- Delivered automation, multi-account sync, firmware over-the-air and an admin dashboard; published both apps to Google Play and App Store

Wi-Fi Quality of Experience & Analytics System

2021 – 2022

Management and analytics tools for converged campus networks and Wi-Fi data centers — inventory, licensing, troubleshooting and QoE analytics

CLIENT	ROLE	PROCESS
Enterprise networking domain	Backend Engineer	Agile/Scrum

TECH STACK

Backend	Java, Quarkus, Hibernate, REST · Apache Kafka, VerneMQ, Avro
Database	PostgreSQL / TimescaleDB, MongoDB
DevOps / Test	Docker, Kubernetes, Helm, Jenkins · Postman, JMeter, Robot Framework

KEY ACHIEVEMENTS

- Designed and developed **core Quarkus microservices** that transform network data into QoE / analytics data
- Handled high-load **time-series data on TimescaleDB**, streamed between services via Kafka
- Took part in architecture design, task distribution and code review; load and API performance testing with Robot Framework and JMeter

Smart Home IoT Control System

2020 – 2021

IoT control system for Wi-Fi smart devices (touch switches, door / motion sensors, IR controllers) using MQTT for low-bandwidth, reliable messaging

CLIENT	ROLE	PROCESS
Smart home / IoT domain	Full-Stack Developer	Agile/Scrum

TECH STACK

Mobile	Kotlin, MVVM Jetpack, Coroutines, Retrofit / OkHttp, SQLite, React Native
Backend	Quarkus, Node.js (WebSocket), MQTT
Database / DevOps	PostgreSQL / TimescaleDB, MongoDB · Docker, Kubernetes, Jenkins

KEY ACHIEVEMENTS

- Built the **Android app (Kotlin, MVVM + Coroutines)** controlling Wi-Fi devices over MQTT
- Implemented QR device onboarding, **offline mode**, automation scenes, multi-account sync and **firmware over-the-air (FOTA)**
- Developed the backend server and WebSocket communication, plus a Node.js test server; published to Google Play and App Store

Early projects

2019 – 2020

Developer community app (Kotlin, MVVM, Firebase) · Movie discovery app (Flutter, Provider, Google Maps) · Team management app (Flutter, web + mobile)

PERSONAL PROJECTS

Technical Team — AI engineering team plugin

2026

Claude Code plugin running a virtual software team: a tech-lead orchestrator routes each request through 12 specialist agents and 7 delivery pipelines, with resumable state.

↗ github.com/Tuan-Quyen/technical-teams

Claude Code plugins · AI agents · Prompt engineering

QC Social — Backend & Mobile

2024

Social app with a Java Quarkus backend (reactive REST, WebSocket, OpenAPI) on MongoDB and a Flutter mobile client.

↗ github.com/Tuan-Quyen/qcsocial

Java · Quarkus · MongoDB · WebSocket · Flutter

TOEIC 3D Study Room

2026

Multiplayer 3D web app for group TOEIC study: shared library desks with practice sets and Pomodoro, proximity voice and text chat, timed exams with leaderboards and weekly stats.

↗ github.com/Tuan-Quyen/GiaoLuuTiengAnh

TypeScript · Three.js · Express · Socket.IO · Vite · SQLite · Docker

EDUCATION

B.Sc. Information Technology

HCMC University of Foreign Languages & Information Technology · 2015 – 2019