ARAVIND SIVA H

Software Developer — Full Stack & Mobile

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SUMMARY

Software developer with 2+ years building production mobile and web systems end to end. Sole developer of an offline-first GIS field-survey platform for the Tamil Nadu Forest Department — a React Native app, an Express/PostgreSQL API and a React admin dashboard — alongside live commercial web products and Flutter apps, including Bluetooth beacon check-in. Comfortable owning a system from data model and API design through to the shipped interface.

EXPERIENCE

Software Developer

Feb 2024 – Present | Tamil Nadu, India | employer name available on request

Mobile Forest Boundary (MFB) — *offline GIS field-survey platform, Tamil Nadu Forest Department*

- Sole developer across three repositories: a React Native (Expo, TypeScript) field app, a TypeScript Express/PostgreSQL REST API, and a React admin dashboard for reporting and exports.
- Built an offline-first data layer on WatermelonDB (SQLite) with a network-aware sync engine — queued writes, automatic flush on reconnect and idempotent retries on the API — so survey teams can work with no network coverage.
- Implemented GPS boundary capture on MapLibre with a 5-metre accuracy hard-block, geotagged photo capture and offline basemap tiles; hardened with JWT auth, rooted-device detection and screenshot blocking.
- Organised nine feature modules using Feature-Sliced Design, with lint, typecheck and tests running in CI on every push.

Hive — *coworking management platform (client project)*

- Built the platform as a TypeScript monorepo: a React Native (Expo) member app, a React admin portal and a Fastify/Prisma API over MySQL, with Zod contracts and design tokens shared across all three.
- Implemented Bluetooth check-in — iBeacon ranging on the phone feeding a presence state machine, with a grace window so a lift ride or a bag does not sign a member out, and a simulator so the flow can be tested without beacons.
- Covered bookings, credits, attendance, visitors, tickets and feedback across 21 API modules and 27 data models, with background jobs for auto check-out, booking expiry and monthly credit grants.

Vendolite — *vending machine platform*

- Flutter customer app communicating with vending machines over BLE, with barcode scanning, encrypted local storage and Firebase services.

Web products — *shipped and live*

- sgdestinations.com: a resort booking and events platform in React (GSAP, TanStack Query, React Hook Form + Zod) with an admin dashboard staff use to update content without a developer.
- 3d-tour-app.vercel.app: a Next.js virtual property tour combining pre-rendered video navigation with a React Three Fiber 360° panorama viewer, floor plans and mapping.

TECHNICAL SKILLS

Languages: TypeScript, JavaScript (ES6+), Dart, Python, SQL, HTML5, CSS3
Mobile: React Native (Expo), Flutter, BLE / iBeacon integration, offline-first sync, Firebase
Frontend: React, Next.js, Angular, Zustand, TanStack Query, GSAP, Web Accessibility (WCAG)
Backend: Node.js, Express, Fastify, REST API design, JWT auth, Prisma, BullMQ / Redis, Zod, AWS S3
Data: PostgreSQL, MySQL, SQLite / WatermelonDB, schema design, offline-first sync
Practices: Git, GitHub Actions CI, Jest testing, Figma handoff, Feature-Sliced Design, performance optimisation

EDUCATION

B.Sc. Computer Science — First Class with Distinction | St. John's College of Arts and Science, Palayamkottai | 2021

CERTIFICATIONS & LANGUAGES

Java Full Stack Developer (Qspider) • Introduction to Python (Microsoft Learn)
Tamil (native) • English (professional working proficiency)