

ANISH KUMAR A

Software Engineer | Backend • Distributed Systems • Full Stack • IoT
Bengaluru, Karnataka, India • 8870208686 • anishkumarak8686@gmail.com

[LinkedIn](#) • [GitHub](#) • [Portfolio](#)

PROFESSIONAL SUMMARY

Software Engineer with 3+ years of experience building scalable backend systems, full-stack web applications, mobile products, and real-time IoT platforms. Experienced in Node.js, Python, FastAPI, Django, microservices, REST APIs, event-driven architectures, WebSocket/MQTT, Redis, Kafka, RabbitMQ, and Docker. Built production systems across EV charging, IoT monitoring, logistics, e-commerce, inventory, and SaaS. Strong end-to-end ownership across architecture, API development, database design, deployment, and production debugging.

Core Competencies: Backend Engineering • Distributed Systems • Microservices • API Design • Event-Driven Architecture • Real-Time Systems • IoT • Database Design • Cloud & DevOps

TECHNICAL SKILLS

Languages: Python, JavaScript, TypeScript, SQL, HTML, CSS

Backend: Node.js, Express.js, FastAPI, Django, REST APIs, Authentication, Authorization, Microservices, MVC, Socket.IO

Frontend: React.js, Next.js, Bootstrap, AJAX

Mobile & Desktop: Flutter (Android, iOS, Windows, macOS), GetX

Databases: MongoDB, PostgreSQL, MySQL, SQL Server, Redis

Messaging & Event Streaming: RabbitMQ, Kafka, MQTT, TCP, WebSocket

IoT & Real-Time Systems: OCPP 1.6J, MQTT Telemetry, CAN Protocol, Serial Communication, EV Charging, GPS Tracking, Device Monitoring

Architecture & Engineering: System Design, Distributed Systems, Event-Driven Architecture, API Design, Caching, Asynchronous Processing, Database Indexing, Security (JWT, OAuth 2.0, RBAC)

Observability: Application Logging, Error Handling, Production Debugging, Performance Monitoring, API Monitoring

Cloud & DevOps: Docker, Git, GitHub Actions, AWS (EC2, S3, OpenSearch), DigitalOcean, Akamai CDN, Kubernetes (worked with deployments and persistent storage configurations)

Testing & Tools: Postman, Swagger, Jira, Docklight, VS Code, Linux, macOS

PROFESSIONAL EXPERIENCE

Software Engineer — Outdid Unified Pvt Ltd

January 2024 – Present • Bengaluru, Karnataka

Worked as a Full Stack Software Engineer building backend services, Flutter applications, React dashboards, IoT communication systems, and production deployments for EV charging, semiconductor, logistics, inventory, and SaaS platforms.

Key Contributions

- Designed and developed scalable backend services using Node.js, Express.js, FastAPI, and Django.
- Built microservices architecture with RabbitMQ, Kafka, Redis, and REST APIs, applying caching and asynchronous processing to improve application performance and reliability.
- Developed real-time IoT communication using OCPP 1.6J, MQTT, TCP, WebSocket, and Socket.IO for distributed device telemetry.
- Designed MongoDB, PostgreSQL, MySQL, and SQL Server schemas, including geo-spatial indexing and optimized SQL queries.
- Built Flutter applications for Android and iOS using GetX architecture.
- Developed responsive web applications and admin dashboards using React.js and Next.js.
- Integrated Razorpay payments, Google Maps APIs, Firebase push notifications, and WhatsApp notifications.
- Containerized applications using Docker and automated deployments with GitHub Actions and Akamai CDN.
- Collaborated with QA, hardware, Android, PCB, and product teams following Agile Scrum methodology.
- Participated in architecture discussions, code reviews, debugging production issues, and release management.

FEATURED PROJECTS

1. Ion Hive EV Charging Platform

Role: Backend Engineer

Stacks and Skills: Node.js, FastAPI, MongoDB, OCPP 1.6J, WebSocket, Razorpay, Google Maps

Built and maintained backend infrastructure for a production EV charging platform supporting charger communication, charging sessions, payments, wallets, and real-time monitoring.

- Implemented OCPP 1.6J communication between chargers and backend.
- Designed REST APIs consumed by Flutter mobile apps and React admin portals.
- Built WebSocket services for real-time charger status and charging session updates.
- Implemented wallet, payment, charging session, and location management APIs.
- Designed MongoDB schemas for chargers, users, sessions, wallets, and transactions.
- Integrated Razorpay payments and Google Maps charger discovery.
- Supported production deployments, bug fixes, and feature releases across multiple client environments.

2. Spark Minda EV Charging Platform

Role: Backend Engineer

Stacks and Skills: Node.js, FastAPI, MongoDB, OCPP 1.6J, WebSocket, Razorpay

White-labeled, multi-tenant enterprise deployment built on top of Ion Hive.

- Extended backend for multi-tenant architecture.
- Added tenant-level charger configuration, branding, and routing.
- Supported independent deployments for enterprise customers.

3. Remote Monitoring System (IoT)

Role: Full Stack Engineer

Stacks and Skills: Next.js, Flutter, MQTT, Node.js, MongoDB

Built a real-time monitoring platform for industrial water purifier devices.

- Implemented an MQTT telemetry ingestion pipeline for distributed device data.
- Displayed live sensor values, alerts, and analytics dashboards.
- Built monitoring apps across Android, iOS, Windows, and macOS.
- Designed backend APIs for device management and telemetry history.

4. Semicon Space

Role: Backend Engineer

Stacks and Skills: Node.js, Python, PostgreSQL, MongoDB, Redis, Kafka, Docker, Firebase

Built distributed backend services for a semiconductor supply chain platform.

- Developed User, Product, Cart, Order, Notification, and Logistics microservices.
- Integrated Redis caching to reduce database load and improve response times.
- Produced Kafka events for asynchronous, event-driven workflows.
- Integrated Firebase push notifications.

5. Railway IoT Configuration & Diagnostics Tool

Role: Full Stack Engineer

Stacks and Skills: Flutter, CAN Protocol, Serial Communication

- Developed a cross-platform desktop configuration tool for railway IoT boards used for device configuration and data exchange.
- Implemented CAN and serial communication protocols for reliable device-to-computer data transfer.
- Built data-transfer workflows similar to Docklight for monitoring and configuring connected hardware.
- Connected Zoho Books and Zoho Inventory APIs.
- Built Docker deployment for multiple backend services.

6. Vehicle Tracking System (VTS)

Role: Backend Engineer

Stacks and Skills: Node.js, Python, MongoDB, Socket.IO, Google Maps

- Developed a GPS tracking backend for fleet vehicles.
- Built real-time vehicle location updates using Socket.IO.
- Optimized MongoDB geo-spatial queries for route and location lookups.
- Integrated Razorpay subscriptions.

7. Battery Health Monitoring System (BMS)

Role: Backend Engineer

Stacks and Skills: Node.js, MongoDB, Next.js

- Processed battery telemetry streams.
- Built APIs for battery analytics dashboards.
- Implemented alert logic for thermal events and fault detection.

8. Additional Projects

Stacks and Skills: Python, Node.js, MongoDB

- Inventory Management System • Managed Services Platform

PERSONAL PROJECT

LinkCrio

Stacks and Skills: NextJS, Flutter, Node.js, MongoDB, Docker, Firebase

Built and deployed a production-ready social media & public profile management platform.

- Designed backend architecture and Flutter application.
- Implemented authentication, analytics, profile customization, and sharing.
- Managed hosting, custom domain, deployment, and monitoring independently.

Website: linkcrio.com

DEPLOYMENT & DEVOPS

- Managed containerization with Docker and CI/CD pipelines via GitHub Actions.
- Deployed and scaled applications on AWS (EC2, S3, OpenSearch) and DigitalOcean.
- Published releases via Akamai CDN.
- Worked with Kubernetes deployments and persistent storage configurations.

EDUCATION

Bachelor of Technology — Information Technology

KGISL Institute of Technology, Coimbatore, Tamil Nadu • Graduated: 2024

CGPA: 8.5 / 10

CERTIFICATIONS & TRAINING

- IBM Full Stack Python Development
- Docker Essentials
- Postman API Testing
- AWS Cloud Practitioner — In Progress

LANGUAGES

Malayalam — Native • Tamil — Professional Working Proficiency • English — Professional Working Proficiency • Kannada — Basic