Surya Madhavan

+91-9920093425 | surya.madhaone@gmail.com | linkedin/surya-madhavan | github/greykoalacode | Mumbai, India | msurya.in

Professional Summary

Full Stack Engineer with 3.5+ years of experience engineering solutions across B2B SaaS, healthcare, and automotive domains. Technical expertise spans TypeScript, Node.js, React, Next.js, and cloud infrastructure using Amazon Web Services (S3, Lambda, Cognito, DynamoDB). Adept at building robust product features, optimizing backend performance, and implementing asynchronous data workflows.

Professional Experience

Lew Innovation August 2024 – Present
Full Stack Engineer *Remote*

- **B2B Email Marketing Platform:** Built MVP/V1 for B2B SaaS client on Next.js, PayloadCMS, and Express for 500+ campaigns; developed dashboard, per-lead, and accounts pages with Material UI for lead tracking, Nylas account linking, and email scheduling.
- **Nylas Email Integration:** Integrated Gmail/Outlook via Nylas for intro/follow-up sending and tracking; migrated draft flow to real-time DB-backed requests.
- **Recurring Campaign Engine:** Built recurring campaign engine with working-hour cadence and conditional follow-ups; reduced API failures by 50% via concurrency limits and duplicate-send guards.
- **Performance & Scale:** Refactored CPU-bound synchronous scheduling into async GCP Cloud Tasks processing; optimized lead data queries for 100K+ records at scale.
- **Lead Data & API Security:** Hardened lead APIs with rate limiting, secure key management, and pagination for 100K+ leads.
- **Email Signature Editor:** Built Plate.js signature editor and Chrome extension to import Gmail/Outlook signatures.
- **AI Personalization:** Integrated AI-generated value propositions with user-editable prompt placeholders resolved from lead data.
- **Healthcare Platform:** Full-stack engineer on a second client engagement — pharmaceutical patient-support platform on AWS spanning nurse-facing tools, patient enrollment journeys, and engagement workflows across multiple drug programs.
- **Patient Portals:** Built and maintained React/Amplify enrollment portals; delivered registration, services/preferences, leave-program flows, and branded patient email communications.
- **Nurse UI & Lex Chatbot:** Extended shared nurse-facing web apps with appointment management, patient profiles, and consent workflows; integrated custom Lex chatbot on patient dashboards.
- **Nurse-Patient Assignment:** Delivered end-to-end assignment with role-based access, admin UI, and AWS Connect call routing so patient calls and appointments follow nurse assignments; achieved 85% unit test coverage.
- **Patient Engagement:** Built satisfaction surveys and automated welcome-call and appointment scheduling based on patient risk level.

Capgemini August 2022 – May 2024
Software Engineer *Mumbai, India*

- **Vehicle Assembly Forecasting (BMW):** Developed backend microservices for manufacturing forecasts; refactored Kafka Streams pipelines to support multi-tenant data isolation across 3 assembly plants, processing 50K+ events/day.
- **Test Coverage Improvement:** Rewrote JUnit and Mockito integration tests for 5 Spring Boot microservices, improving code coverage from 25% to 65%.
- **Static Analysis & Quality:** Reduced SonarQube critical issues by 80% through refactoring and static analysis fixes.
- **Real-Time Analytics POC:** Built event-driven e-commerce analytics pipeline using Kafka Streams and Spring Boot.

Technical Skills

Languages: JavaScript, TypeScript, Java, Python, SQL, HTML/CSS/SASS
Frontend: React.js, Next.js, Vue.js, Redux, TailwindCSS, Material UI, Plate.js, Vitest, Jest
Backend: Node.js, NestJS, Spring Boot, GraphQL, REST APIs, Payload CMS, TypeORM, Hibernate
Cloud/Infra: AWS (S3, Lambda, DynamoDB, Lex, Cognito, SES, SNS/SQS, EventBridge, Amplify, Connect, SSM), GCP (Buckets, Cloud Tasks, Queue), Docker, Git
Databases: PostgreSQL, MongoDB, Apache Kafka, SonarQube

Education

University of Mumbai Graduated: June 2022
Bachelor of Engineering in Electronics & Telecommunications *CGPA: 9.12/10*