Suriyaa Kumar

Chennai, India | +91 908-021-5405 | believeinsurya@gmail.com
suriyaa.dev | linkedin.com/in/suriyaakumar | github.com/suriyaakumar

Work Experience

Software Development Engineer 2 Sep. 2024 – Present
Comcast - Sky Italia *Chennai, India*

- Delivered automated billing and refund self-service experiences across conversational services and React WebChat, enabling customers to review invoices, credit notes, and attachments and access refund/dispute workflows directly through digital support channels.
- Expanded order and installation tracking capabilities for Sky Q, Sky Stream, and FTTH by integrating backend shipment APIs with reusable conversational workflows, providing customers with self-service access to delivery and installation status.
- Delivered end-to-end Netflix and Sport voice self-service journeys and expanded Sky Mobile/DALMATA capabilities during a major Q3 2026 delivery cycle, extending shared intent routing, dialog orchestration, and cross-dialog state management.
- Designed and implemented a versioned, AGCOM-aligned operator-handover subsystem, standardizing preliminary checks, callbacks, referrals, and contingency handling to support consistent customer escalations across voice journeys.
- Modernized shared backend infrastructure by decomposing legacy self-care integrations into 4 domain-scoped TypeScript API modules, reducing coupling and enabling more maintainable, independently extensible services across chat and voice applications.
- Strengthened platform delivery and operational reliability by implementing Jenkins/CircleCI build and release-validation infrastructure, coordinating Houston and Copernico release integration, and resolving post-launch defects across billing and tracking workflows.

Software Developer Aug. 2021 – Mar. 2024
Cloudify Private Limited *Remote*

- Delivered core full-stack capabilities for **Lighthouse V2**, a B2B SaaS automation platform, including authentication, onboarding, billing, account management, and operational dashboards using Next.js and TypeScript.
- Implemented type-safe backend APIs and data models using tRPC, TypeScript, Drizzle ORM, and PlanetScale, supporting workflow and connection management with validation, indexing, and REST/OpenAPI interfaces.
- Created reusable typed API connectors and integration tooling across CRM, ERP, payments, and e-commerce systems, reducing development effort for new automation workflows by approximately **70%**.
- Engineered event-driven integrations using AWS Lambda, SQS, and webhooks to automate order, subscription, invoicing, and synchronization workflows across **25+ European clients and 50,000+ integration records**.
- Enhanced marketplace onboarding and production-support workflows, contributing to a **35% increase in client lead inflow** and building tooling used to manage **1,000+ client automation failures per month**.
- Onboarded junior developers to the AWS SST serverless stack, helping them ramp up on the application's TypeScript-based frontend and backend development workflows.

Technical Skills

Languages: TypeScript, JavaScript, Python, HTML/CSS
Frontend: React, Next.js, Tailwind CSS, Shadcn UI
Backend & APIs: Node.js, Express, tRPC, REST APIs, OpenAPI/Swagger
Cloud & Infrastructure: AWS, Microsoft Azure, AWS SST, AWS Lambda, Amazon SQS, Docker
Databases & ORM: Cosmos DB, PlanetScale, Drizzle ORM
DevOps: Jenkins, CircleCI

Projects

Blog RAG and Evaluation | *Python, Gemini API, AWS Lambda, S3*

- Built an **end-to-end RAG pipeline** with heading-aware Markdown chunking, Gemini embeddings, and source attribution; implemented an **authenticated AWS Lambda handler** using S3-backed JSON vectors and NumPy-based cosine similarity search to keep infrastructure lightweight for a small corpus.
- Implemented **incremental synchronization and embedding reuse** through GitHub file SHA comparison and SHA-256 content hashing, avoiding redundant downloads and embedding calls; added **atomic persistence and API retries** for failure recovery.
- Added **similarity-threshold filtering** and generation prompts for abstention and false-premise handling; authored a **15-case evaluation dataset** to assess source retrieval, unsupported questions, out-of-scope requests, and prompt-injection responses.

Education

Velammal Institute of Technology Chennai, India
Bachelor of Engineering (B.E.) in Computer Science *Aug. 2017 – May 2021*