SATYA SANDEEP

Senior Software Engineer | Backend & Platform Systems | Fintech & Web3

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SUMMARY

Backend engineer with **7+ years** building distributed systems across **logistics, fintech, and Web3**. Progressed from shipping end-to-end products as a freelancer to leading engineering at Logicarts and owning revenue-critical platform infrastructure at Transak. Experienced in designing backend systems, writing technical design documents, leading framework migrations, and operating **high-scale production services** across 150+ countries.

KEY IMPACT

- Designed and owned the Ledger On-Ramp and Off-Ramp integrations end-to-end, covering API contracts, service integration, widget delivery, and production monitoring as one of Transak's top revenue-generating partner integrations
- Worked on the partner integration wrapper service serving as a unified API layer for top crypto wallet partners including MetaMask, Ledger, and Trust Wallet
- Maintained platform reliability across **300+ partner integrations** serving millions of users in 150+ countries, across 35+ payment methods
- At Logicarts, designed and shipped a barcode-based tracking platform that closed a **Rs. 2 Cr+ enterprise deal** and scaled operations from **1 to 35+ cities** across South India
- Designed the full logistics platform architecture from scratch supporting **35+ cities, 200+ vehicles**, and enterprise integrations with Amazon, Flipkart, and Delhivery
- Built unified wallet management layer across all services and products, improving UX for **millions of users** and increasing conversion; integrated AML screening saving **1000+ manual Ops reviews per month**
- Maintained **5 core repos** and contributed across **15+ repositories** over 5 years, collaborating with **20+ engineers** across backend, frontend, and mobile

TECH STACK

Backend	Node.js, TypeScript, Hapi.js, GraphQL, REST APIs, Microservices, Event-driven Architecture, LoopBack
Frontend	React, Next.js, React Native, Tailwind CSS
Databases	MongoDB, PostgreSQL, Redis (caching, distributed locks), Elasticsearch
Infrastructure	AWS (EC2, S3, Lambda), Docker, Nginx, PM2, CI/CD, Jenkins, Cloudflare
Observability	Sentry, New Relic, Grafana, Loggly, Mixpanel, p95/p99 latency monitoring
Web3	Solidity, Ethers.js, Hardhat, The Graph, Wallet Integration, IPFS, Alchemy
AI / Automation	n8n, LLM integrations, Voice Agents, Vector Search, Embeddings

HACKATHONS | 9X WINNER

Aaveasy ETH Global 2023	Aave 1st, Arcana 1st, The Graph 2nd. DeFi platform for deposits, borrowing, and repayments with social login and on-chain portfolio tracking.
DagSnap Constellation 2023	Tooling 3rd Place. MetaMask Snap with Node.js proxy bridging dag4.js into the Snap sandboxed environment for full DAG wallet management inside MetaMask.
Immunomic Chainlink Hackathon	Polygon Pool Winner. Blockchain certificate issuance and verification using Solidity smart contracts and Chainlink for tamper-proof on-chain credential storage.

SIDE PROJECTS

Voice Agent Orchestrator	Multi-agent voice AI platform where agents orchestrate together to answer questions about any URL.
React Zombies	Full-stack course platform built from Figma to production; later open-sourced.
AI Code Reviewer	Analyses a pull request and posts inline AI-generated code review comments automatically.
Yellow Studio	Chat-to-website builder; describe a site and it gets generated, payments in crypto tokens.

EDUCATION

Bachelor of Engineering | **SCSVMV University** *Graduated 2018*

WORK EXPERIENCE

Senior Software Engineer | Transak

Jul 2021 to Present

*Fiat-to-crypto infrastructure provider processing thousands of orders daily across 35+ payment methods and 150+ countries, serving millions of users and 300+ partners including MetaMask, Ledger, and Trust Wallet. Core services handle up to **3000+ API calls per minute** with p99 under 500ms.*

- Owned the **Ledger On-Ramp** and **Ledger Off-Ramp** integrations end-to-end covering API contracts, service integration, frontend widget delivery, and production monitoring, one of Transak's highest-volume partner integrations
- Led **FATF Travel Rule compliance** across 5 backend services, customer UI, and internal AML tooling; authored the technical design document across 3 iterations with legal and product, integrated Notabene, and separated pre-order collection into independent Travel Rule and refund-wallet streams
- Chose Redis distributed locks combined with MongoDB multi-document transactions to guarantee atomicity on refund-wallet rollback, avoiding partial state under failure without requiring distributed sagas
- Standardised identity relay across three services by introducing the **KYC Reliance integration**, allowing partners to submit user identity details via APIs and eliminating re-verification friction across the platform
- Worked on the **partner integration wrapper service** serving as a unified API layer for top crypto wallet partners; standardised API contracts and abstracted partner-specific configuration across high-traffic flows handling **2000+ requests per minute** at peak
- Introduced retry-with-backoff and idempotency handling on **webhook delivery** for KYC status, transaction, and payment events across 300+ partner integrations, eliminating duplicate processing on provider failures
- Modernised a core microservice by migrating **100+ APIs** from LoopBack to Hapi.js across four feature-flagged releases, increasing test coverage from under 10% to 87% with zero downtime and zero rollback
- Drove the extraction of Partner and Admin services out of the monolith as the engineering team scaled; actively maintained **5 core repos** and contributed across **15+ repositories** over 5 years, collaborating with **20+ engineers** across backend, frontend, and mobile
- Designed all owned microservices to be stateless and horizontally scalable, offloading session state to Redis to eliminate single points of failure
- Architected a unified **wallet management module** as the single storage layer for user wallets across all services and products, using Redis distributed locks to prevent concurrent edits on the same user record, improving UX for millions of users and directly increasing conversion
- Rolled out centralised auth across 6 services as part of the **Auth Reliance** project, standardising token introspection and eliminating per-service auth logic
- Introduced PR standards and SonarQube quality gates across backend services, reducing code smell count from 200+ to under 10 and eliminating post-release production regressions on owned services
- Onboarded new engineers as a buddy across multiple hiring cycles, helping them ramp up on system architecture, codebases, and production workflows; interviewed engineering candidates at both Transak and Logicarts
- Consolidated all internal tooling as single Retool POC: reviewed others' work, maintained 50+ dashboards, and operationalised analytics across Sales, Finance, Ops, and Revenue teams
- Drove the **account management and Gross Profit analytics tool** for the sales team, giving visibility into partner performance, GP across region and payment method pivots, and real-time incentive calculations without engineering involvement
- Operationalised a **partner payout system** and **sales incentive calculation engine** handling partner-specific payout processing and real-time incentive computation for revenue and sales teams
- Owned production observability across Sentry, Loggly, Elasticsearch, Mixpanel, and New Relic; maintained **p99 latency under 500ms** at **3000+ API calls per minute**, actively participated in production incident response, and acted as escalation point for live partner and transaction issues
- Eliminated ~1000 manual Ops reviews per month by integrating AML wallet screening on refund and on-ramp flows before wallet-address creation
- Scaled internal operations by introducing **n8n-based AI agents** integrating Intercom, HubSpot, Slack, and Telegram, reducing repetitive overhead across 1000+ partner groups
- Defined an internal **competitor pricing analysis system** benchmarking Transak's rates against competitors across key markets, enabling Sales and pricing teams to make data-driven decisions on partner fee configurations

WORK EXPERIENCE

Software Engineer (Tech Lead) | Logicarts

Feb 2020 to Jul 2021

B2B logistics platform. Came in as the first engineering hire after the CTO.

- Designed the overall logistics platform architecture supporting **3 backend services, 3 mobile apps, and 2 operational dashboards** used across 35+ cities, scaling from a single city operation to a multi-region platform serving enterprise clients
- Led a **5-person engineering team** across backend, frontend, and mobile, owning 3 Node.js backends, 3 mobile apps, and 2 dashboards end-to-end from idea to production; mentored junior engineers on backend design, code quality, and delivery practices
- Designed and shipped a barcode-based shipment tracking platform that directly enabled onboarding of a marquee enterprise client worth **Rs. 2 Cr+ (~$240K) in annual contract value**
- Scaled platform operations from **1 to 35+ cities** across South India; built internal dashboards covering order management, vehicle and vendor tracking, route planning, trip management, and daily logistics workflows with analytics and reports
- Built client-facing platform for order placement, real-time tracking, and shipping label access; implemented **order grouping, route optimisation, vehicle loading, captain assignment, POD generation, and tracking number assignment** for part-load and full-load consignments, with live shipment scanning via mobile apps
- Built and maintained **200+ REST APIs** across 3 Node.js backend services powering dashboards, mobile apps, and enterprise integrations for Amazon and Flipkart; maintained API documentation on Postman
- Integrated GPS devices and Wheelseye for **live vehicle and shipment tracking** across **200+ vehicles** with enterprise clients including Amazon, Flipkart, and Delhivery, with background cron jobs continuously pushing live location pings to their partner APIs
- Deployed a dedicated **Windows Server** to handle PRN file generation for Bluetooth thermal printer integration used for on-ground label printing, as Linux servers could not handle PRN files natively
- Built a **real-time vendor bid system** that broadcast vehicle requirements instantly to all vendor mobile apps; vendors could submit quotes and the ops team could finalise bids and close requirements from a central dashboard
- Designed a **Billing Management System** with multi-level RBAC across employee, manager, and finance roles, covering ticket creation, approval workflows, payment tracking, and money-transfer controls, reducing fraud and manual intervention
- Integrated **Razorpay** for payment processing and implemented **Firebase push notifications** across mobile apps for real-time order and shipment status updates
- Led and supported 2 Android developers across 3 internal mobile apps, ensuring smooth backend integration and feature rollouts
- Deployed and ran infrastructure on AWS (EC2, S3) with Docker, Nginx, PM2, and Cloudflare, optimising SQL queries for performance as the platform scaled

Full Stack Engineer | Freelance

Feb 2019 to Dec 2019

Built and shipped production systems for early-stage founders across ecommerce, logistics, education, and agri supply chain. Delivered 7+ mobile apps, 8+ dashboards, and 15+ backend services end-to-end across 10 months.

- Designed a **multi-role ecommerce platform** with mobile apps handling the full order lifecycle: pricing engine, coupon management, fulfillment, inventory, settlements, and delivery operations; built **MongoDB aggregation pipelines** for operational reporting and automated delivery scheduling via cron jobs
- Built a full-stack **agri supply chain platform** with **3 mobile apps** (Grower, Agent, Vendor) and **2 web dashboards** covering role-based procurement workflows, inventory, pricing, logistics, and real-time order tracking across all stakeholders
- Built an **LMS** with course management, progress tracking, and a split-screen **browser-based virtual machine playground** allowing learners to practice directly within the platform
- Built a **bulk certificate generation platform** with CSV upload and automated validation workflows, reducing certificate issuance **from hours to minutes** for large-scale batches

Co-Founder | Nargiz Electric

2018 to 2020

Early-stage EV charging startup. Built working prototypes for EV charging stations designed for the Indian market.

- Co-founded the company and led product development across hardware and software, from initial concept through to working prototypes of EV charging stations
- Designed hardware prototypes using SolidWorks and handled embedded software integration for the charging station units
- Built the company website using React.js and Bootstrap and handled early-stage business development and client outreach