

Sahil Samanta

Backend Software Engineer

Kolkata, West Bengal, India | sahilsamanta5@gmail.com | +91 96747 04931 | sahilsamanta.vercel.app
linkedin.com/in/sahilsamanta

Professional Summary

Backend Software Engineer with nearly two years of experience building scalable web applications, REST APIs, enterprise platforms, and e-commerce systems using Python, Django, Django REST Framework, FastAPI, Flask, React, Next.js, SQL databases, Docker, and cloud technologies. Experienced in architecting end-to-end software solutions, integrating third-party services, and delivering production-ready applications in startup environments.

Technical Skills

Programming Languages: Python, JavaScript, TypeScript, SQL

Backend: Django, Django REST Framework (DRF), FastAPI, Flask, REST APIs, GraphQL APIs

Frontend: React, Next.js, React Native, HTML5, CSS3, Tailwind CSS, Bootstrap, AJAX

Databases: MySQL, MongoDB, Firebase Firestore

Cloud & DevOps: Docker, Linux, Nginx, AWS IAM, AWS Lambda, GCP VM, PM2, Jenkins, Seed.run, Firebase Hosting

Tools: Git, GitHub, Postman, Jira, Shopify GraphQL API, Magento, Google Analytics 4 (GA4), Looker Studio, Google Tag Manager (GTM), Canva

Professional Experience

Backend AI Engineering Intern, FlyRank AI June 2026 – Present

- Selected as a Backend AI Engineering Intern, contributing to AI-powered backend systems and modern Python development.

System Engineer, PlanTech Engineering Services Oct 2025 – May 2026

- Developed an employee attendance management system using FastAPI, React Native, and MySQL to streamline internal operations.
- Coordinated between stakeholders, engineering teams, and finance departments to translate operational requirements into technical solutions.
- Designed and maintained company websites, brochures, product catalogs, business cards, and other digital marketing assets.
- Designed the official logo for the Padrone industrial product brand.

Software Engineering Intern → Software Engineer, Katalyse AI Jun 2025 – Sep 2025

- Promoted from **Software Engineering Intern** to **Software Engineer** based on performance.
- Developed reusable React components for an AI-powered Shopify conversational commerce platform used by international brands.
- Designed and implemented Google Analytics 4 (GA4) event tracking and dynamic Looker Studio dashboards, providing actionable analytics for clients.
- Integrated MongoDB-driven dashboard configuration to dynamically serve customer-specific analytics after authentication.
- Collaborated on GraphQL API integration, backend testing using Postman, and production deployments on Google Cloud VM instances using PM2.

Junior Software Engineer, Kreative Chimp

Oct 2024 – May 2025

- Developed scalable backend systems, REST APIs, and administrative portals for CMS, CRM, school management, and e-commerce platforms using Django, Django REST Framework, Next.js, TypeScript, MySQL, and Tailwind CSS.
- Independently architected and developed **ActivCarto**, a multi-vendor e-commerce platform featuring role-based access control, product management, categories, currencies, inventory management, and administrative dashboards.
- Designed, developed, and maintained **100+ REST API endpoints** supporting multiple production applications and internal management systems.
- Optimized Docker images from approximately **1.8 GB to 250 MB**, significantly improving deployment efficiency and reducing container size.
- Diagnosed and resolved Linux, Apache, Nginx, Docker, and WHMCS infrastructure issues, including production server troubleshooting and deployment support.

Junior Software Developer, Cloud Express Solutions (Client: Foreva)

Jul 2024 – Sep 2024

- Developed backend services for the Foreva community platform using Flask, building REST APIs and supporting multi-company community features.
- Integrated Shopify GraphQL APIs to retrieve, filter, paginate, and expose product data through backend services.
- Investigated and resolved AWS IAM permission and Lambda deployment issues through root-cause analysis, enabling successful serverless deployments using Seed.run.
- Assisted in configuring Jenkins CI/CD pipelines, API validation using Postman, Magento setup, and technical documentation while collaborating through Jira.
- Developed automated test account creation APIs and supported deployment of serverless applications on AWS infrastructure.

Independent Software Engineer, Vishwamurti (Freelance)

2022 – 2024

- Architected and developed multiple full-stack web applications from concept to deployment using Django, Django REST Framework, MySQL, JavaScript, HTML, CSS, and Flutter.
- Designed and implemented **Locope**, a multi-vendor fitness and e-commerce platform featuring role-based dashboards for administrators, gym owners, trainers, staff, and customers.
- Developed 100+ REST APIs, 50+ Django models, 50+ serializers, and 50+ dynamic application pages supporting web and mobile applications.
- Integrated PhonePe payment gateway, implemented membership plans, product variants, community features, AJAX-based chat, user profiles, and social networking functionality.
- Designed and deployed applications on Linux VPS infrastructure while integrating Flutter mobile applications with Django REST Framework backend services.
- Developed **FNB Deals**, a business marketplace platform enabling vendors to manage products and services while allowing customers to submit service enquiries through dedicated management dashboards.

Technical Lead (Volunteer), The Puja App

2022 – Present

- Progressed from supporting operational activities to independently designing, developing, testing, and deploying an AI-powered virtual selfie platform within three days for a Durga Puja cultural initiative.
- Developed the complete application using HTML, CSS, JavaScript, Firebase, and Cloud Firestore, enabling users to generate personalized photos with themed Durga Puja backgrounds.
- Built an administrative dashboard to manage Puja committees, event assets, user submissions, image backgrounds, and application content.
- Integrated the Dezgo AI API for automated background removal and implemented image enhancement features including brightness and contrast adjustments.
- Implemented Google Tag Manager (GTM) for analytics and deployed the application using Firebase Hosting.

Technical Lead, BIMS Startup Catalyst (College E-Cell)

Sep 2023 – Jun 2024

- Architected and led the development of the Startup Catalyst platform using Django, MySQL, HTML, CSS, JavaScript, Bootstrap, and Django Templates.

- Designed and implemented role-based dashboards for administrators and E-Cell members with secure authentication and authorization.
- Developed a content management system for managing mentors, alumni, E-Cell members, blogs, and contribution records through a centralized dashboard.
- Implemented a blog approval workflow allowing members to submit articles for administrator review before publication.
- Designed, developed, and delivered the complete platform within three days for participation in the IIT Bombay E-Cell Startup Catalyst program.

Selected Projects

Locope – Multi-Vendor Fitness & E-Commerce Platform

- **Tech Stack:** Django, Django REST Framework, MySQL, Flutter, PhonePe API
- Architected and developed a complete multi-vendor fitness and e-commerce platform supporting administrators, gym owners, trainers, staff, and customers.
- Implemented role-based dashboards, membership plans, product variants, PhonePe payment gateway integration, and REST APIs for Flutter mobile applications.
- Implemented community features including user profiles, posts, comments, friend management, following, and AJAX-based real-time chat.

AI Virtual Selfie Platform

- **Tech Stack:** Firebase, Firestore, JavaScript, AI APIs, Google Tag Manager
- Designed and deployed an AI-powered virtual selfie platform within three days for a Durga Puja cultural initiative.
- Integrated AI-based background removal, image enhancement, Firebase Authentication, Firestore, and administrative dashboards.
- Implemented Google Tag Manager and deployed the application using Firebase Hosting.

ActivCarto – Multi-Vendor E-Commerce Platform

- **Tech Stack:** Django, Django REST Framework, Next.js, TypeScript, MySQL
- Independently designed and developed a multi-vendor e-commerce platform from scratch.
- Built product management, categories, currencies, inventory management, role-based administration, and scalable REST APIs.
- Developed administrative dashboards supporting business and product management workflows.

Education

Master of Computer Applications (MCA) , Manipal University Jaipur (Online)	2026 – Present
Bachelor of Business Administration (BBA) , Bharatiya Vidya Bhavan's Institute of Management Science	2021 – 2024

Languages

English: Professional Proficiency

Bengali: Native

Hindi: Professional Proficiency

Japanese: Beginner (Preparing for JLPT N5)