

# Sahil Kumar Sahu

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**Full Stack Developer** (1+ years) specializing in end-to-end web solutions. Core expertise in modern JavaScript stacks with full proficiency in front-end, back-end, cloud deployment, and database systems. Delivered production-grade applications with optimized architecture and real-time capabilities.

## Professional Experience

### Software Developer Intern

Kyoros Tech Pvt. Ltd.

Bhubaneswar, Odisha

May 2024 – Nov 2024

- Architected **SaaS-based ICU patient monitoring platform** collaborating with founders to build MVP for real-time healthcare data management
- Optimized PostgreSQL queries with **Redis caching**, reducing API response time from 1.2s to 0.36s (70% faster)
- Built real-time collaboration platform using WebSocket for live monitoring and Firebase Push Notifications for alerts
- Implemented AWS S3 integration for diagnostic reports with Docker Compose deployment on Amazon EC2

### Founding Engineer Intern

Neuvision Technologies Pvt. Ltd.

Aug 2023 – Jan 2024

- Developed **quick commerce platform** connecting users with nearby cloud kitchens using Flutter, Express.js, MongoDB, Next.js, GraphQL
- Optimized database schema and implemented MongoDB geospatial aggregation for location-based discovery with GraphQL for bandwidth optimization
- Deployed to GCP Cloud Run with serverless architecture and established CI/CD pipeline using Google Cloud Build

## Key Projects

### Influencer Management SaaS Platform

[Live Demo](#) — [GitHub](#)

— May 2025

- Built comprehensive SaaS platform for influencer discovery and outreach automation across multiple social media platforms
- Implemented AI-powered voice agent using VAPI for human-like conversations with automated email/SMS outreach via MailGun & Twilio
- Tech Stack:** React, TypeScript, Supabase, VAPI, MailGun, Twilio, Vercel

### Open Channel Flow Monitoring System

[GitHub](#) — Dec 2024 -

Apr 2025

- Developed a patented real-time wave monitoring system using Python-based Kafka pipelines to extract wave metrics from sensor data, based on signal processing and hydrology research; deployed on on-premise college servers.
- Implemented a **high frequency (10ms)** data logging pipeline using Kafka Connect to integrate MQTT for sensor ingestion, InfluxDB for real-time analytics, and Amazon S3 for cost-effective long-term storage.
- Created web-based visualization dashboard using Grafana deployed in university's Open Channel Flow Lab
- Tech Stack:** Python, MQTT, Kafka, InfluxDB, Docker, Grafana, IoT (ESP32, MPU6050)

### SmartHome Management System

[GitHub](#) — Aug 2023

- Developed a full-stack IoT solution for real-time appliance tracking using ESP32 sensors, with predictive analytics and mobile alerts via React Native (WebSocket/Redux)
- Engineered a Django backend (SQLite) for device communication, achieving 99.9% uptime in command routing and data logging
- Built an interactive dashboard using React Native Chart Kit and SVG visualizations, displaying real-time energy patterns and historical trends
- Tech Stack:** Django, React Native, MQTT, WebSocket, ESP 32, REST API, Docker

## Technical Skills

**Proficient:** React.js, Next.js, Node.js, TypeScript, Express.js, MongoDB, PostgreSQL, Git, Docker, AWS (EC2, S3)

**Familiar:** GraphQL, Redis, Firebase, Appwrite, Flutter, GCP (Cloud Run), Kafka, React Native

**Tools:** Postman, Vercel, Grafana, Prisma

## Education

### Bachelor of Technology in Electronics and Instrumentation CGPA: 7.87/10.0

Odisha University of Technology and Research (formerly CET, BBSR)

- Relevant Coursework: Digital Electronics, Microprocessors and Controllers, Signals and Systems, Fundamentals of Communication
- Final Year Project: Novel research on generating a new chaotic map for embedded devices and FPGA implementation using Verilog
- Patent Project: Real-time wave monitoring system for hydrodynamics research (Open Channel Flow project)