Sahil Vishwakarma

EDUCATION

Lakshmi Narain College of Technology

Bachelor of Technology - Computer Science Engineering

Jawahar Navodaya Vidyalaya, Sagar

Higher Secondary Certificate (XII) - CBSE Board

Jawahar Navodaya Vidyalaya, Sagar

Secondary School Certificate (X) - CBSE Board

Expected July 2026

CGPA: 8.15/10

April 2021

Percentage: 91.6%

April 2019

Percentage: 92.4%

TECHNICAL SKILLS

Programming Languages: Java, JavaScript, TypeScript, SQL, HTML, CSS

Technologies & Frameworks: Next.js, React.js, Express.js, Node.js, Tailwind CSS, Prisma (ORM), PostgreSQL, MongoDB Tools & Platforms: Git, GitHub Actions, Vercel, Docker, Cloudinary, Postman, Redis

PROFESSIONAL EXPERIENCE

Frontend Developer Intern

TechGenesis (LNCT Incubation Center)

September 2023 - February 2024

Bhopal, MP

- Engineered 8+ responsive websites using React.js, JavaScript, HTML/CSS achieving 95%+ client satisfaction
- Designed visually appealing interfaces with Tailwind CSS, Framer Motion, GSAP, Three.js for enhanced user engagement
- Collaborated with 12-member startup team using shaden/ui and frontend libraries for custom client solutions
- $\bullet \ \ {\rm Reduced\ average\ project\ delivery\ time\ by\ \bf 30\%\ through\ reusable\ component\ architecture\ and\ efficient\ development\ practices}$

Freelance Full Stack Developer

March 2025 - April 2025

Mukul Verma & Co.

Remote

- Delivered enterprise-grade office management SaaS solution handling 50+ concurrent users with 99.9% uptime
- $\bullet \ \ Configured \ multi-tier \ \textbf{RBAC} \ and \ 4 \ role-based \ dashboards \ with \ analytics, feeds, \ and \ task \ overviews, \ leveraging \ RESTful \ APIs$
- Integrated core workflows for task assignment, priority, billing approval, status tracking, and notifications
- Ensured reliability with strong validation, centralized error handling, and Cron jobs for expiry, cleanup, and maintenance

PROJECTS

Office Pilot - Workspace Management SaaS

Live Demo · GitHub

- Created full-stack SaaS using Next.js, TypeScript, Tailwind CSS, Prisma, PostgreSQL, Redis, Cloudinary, Socket.io
- Architected many-to-many schema; improved performance with lazy loading, SSR, and cursor-based pagination
- $\bullet \ \ \text{Implemented real-time chat and notifications using } \textbf{WebSockets} \ \text{with } \textbf{Redis Pub/Sub} \ \text{for seamless communication} \\$
- Secured platform with Role-Based Access Control (RBAC), NextAuth.js, Zod validation, bcrypt hashing, and Redis caching
- Delivered responsive UI with theme toggle, local storage, and full-screen UX enhancements for better user experience

True Feedback - Progressive Web App

 $Live\ Demo\cdot\ GitHub$

- $\bullet \ \ \text{Built anonymous feedback platform using } \textbf{Next.js}, \ \textbf{React}, \ \textbf{TypeScript}, \ \textbf{OAuth}, \ \textbf{OTP} \ \text{validation}, \ \textbf{JWT}, \ \textbf{NextAuth}$
- Integrated OpenAI API and Vercel AI SDK for AI-generated suggestions and category-wise feedback filtering capabilities
- Crafted fully animated, responsive UI using Tailwind CSS, Framer Motion, lucide-react for engaging user experience
- Handled secure feedback storage and updates via MongoDB/Mongoose; validated forms with Zod and React Hook Form

Oil Spill Detection System - Group Project

Live Demo · GitHub

- ullet Delivered dashboard using Next.js 15 with SSR to visualize oil spill segmentation maps and confidence scores
- Coded ML inference pipeline using **U-Net** and **DeepLabV3+** models with **Python**, **FastAPI**, Hugging Face for 95%+ accuracy
- Containerized backend using **Docker**, deployed on **Render** with optimized image processing pipelines and secure **CORS**
- Established CI/CD workflows using GitHub Actions for automated linting, Docker builds, deployment to Vercel and Render

CERTIFICATIONS

NPTEL: Programming in Java · Database Management System · Computer Networks

AWS: Cloud Foundations Certification

ACHIEVEMENTS

- Participated in Smart India Hackathon (SIH) 2024 and 5+ competitive hackathons
- Recognized as "Elite" by NPTEL for Programming in Java (82%) IIT Kharagpur