

SAGAR WAVHAL

Software Developer — AI Application Builder

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Summary

Software Developer building production-deployed full-stack and AI-integrated applications. Integrated Google Gemini API for conversational AI with real-time speech processing in a shipped PWA. Designed and deployed 5 end-to-end systems using AI-assisted development workflows – independently handling architecture, feature design, debugging, and cloud deployment. Currently pursuing specialization in Python, Machine Learning, and Generative AI. Proven delivery of scalable, type-safe applications using React, Next.js, Node.js, TypeScript, and MongoDB.

Technical Skills

Languages: JavaScript, TypeScript, Python (learning), HTML5, CSS3, SQL (learning)
Frontend: React.js, Next.js (15/16), Tailwind CSS, Material-UI, Three.js, GSAP, Framer Motion, Canvas API
Backend: Node.js, Express.js, RESTful API Design, JWT Authentication, Stripe API
AI and GenAI: Google Gemini API Integration, Prompt Engineering, Web Speech API, AI-Assisted Development
Databases: MongoDB, Mongoose ODM, Database Schema Design
Libraries and Tools: Redux, Zod, React Hook Form, React Leaflet, Lucide Icons, Vite, ESLint, npm
Cloud and DevOps: Vercel, Cloudinary, Git, GitHub, CI/CD, PWA (Service Workers)
Currently Learning: Python, Machine Learning, Deep Learning, Statistics, Power BI, Excel

Experience

Frontend Web Development Intern

June 2024 – August 2024

IBM SkillsBuild and CSRBOX

Remote

- Completed 6-week intensive frontend development program covering HTML5, CSS3, JavaScript, and React.js with hands-on project deliverables and code reviews
- Built responsive, accessible web interfaces using component-based architecture, applying Agile development methodology with Git version control and iterative feedback cycles

Projects

AI Voice Assistant | *Next.js, TypeScript, Google Gemini API, Web Speech API, PWA*

2025

- Architected a privacy-first voice assistant with offline speech recognition and Gemini-powered conversational AI, deployed as a Progressive Web App with service worker caching for offline-first functionality
- Integrated Google Gemini API with custom prompt engineering for context-aware multi-turn conversations and engineered real-time speech-to-text pipeline with graceful online/offline fallback

BlogVerse – Full-Stack Content Platform | *React, TypeScript, Node.js, Express, MongoDB*

2025

- Co-developed a production blogging platform with JWT authentication, email verification, rich text editing, and social features (follow, like, nested comments, bookmarks) with analytics dashboard
- Designed RESTful API with rate limiting, input validation, XSS protection, and Cloudinary image optimization; implemented code splitting and caching for optimized frontend performance

E-Shop – E-Commerce Platform | *React, TypeScript, Node.js, Express, MongoDB, Stripe API*

2025

- Built full-stack e-commerce application with product catalog, cart management, Stripe payment integration, role-based access control with separate customer and admin interfaces, and order management workflow

Rambhavan – Restaurant Website | *Next.js 15, TypeScript, Tailwind CSS, Canvas API, React Leaflet*

2025

- Designed and developed a client-facing restaurant website with culturally-themed design, custom Canvas API animations, interactive Leaflet maps, and responsive layouts – deployed on Vercel

SAKAS Dairy – Business Website | *Next.js 16, TypeScript, Three.js, GSAP, React Leaflet, Zod*

2025

- Built a multi-page business website for a dairy brand featuring 3D product showcases (React Three Fiber), GSAP scroll-driven animations, i18n localization (next-intl), and validated contact forms (Zod + React Hook Form)

Achievements and Certifications

- **Winner – Innovate You Techathon 2.0 (2025):** First place at national-level innovation competition; led team to build a solution combining React, MongoDB, Blockchain, and AI integration
- **5 Production Applications Deployed:** All projects live on Vercel with custom domains, serving real users
- **Frontend Web Development Certificate** – IBM SkillsBuild and CSRBOX (August 2024)
- **Responsive Web Design Certification** – freeCodeCamp (2025)

Education

Bachelor of Engineering in Computer Engineering

Expected May 2026

P.D.E.A.'s College of Engineering, Manjari (BK)

Pune, Maharashtra, India

Diploma in Data Science and ML with Generative AI

In Progress

Gamaka AI

Online

Higher Secondary Certificate (HSC) – Science

June 2022

New Arts, Commerce and Science College

Ahilyanagar, Maharashtra, India