

# Vikas Gautam

Full-Stack Developer

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GitHub | LinkedIn | Portfolio | Hugging Face

## Career Objective

Full-Stack Developer with AI integration experience, focused on building **scalable, high-performance web applications** that combine modern frontend frameworks with robust backend systems and **production-grade AI capabilities**. Passionate about clean UI, real-time interactions, and engineering solutions that are reliable, secure, and user-centric.

## Technical Skills

- **Frontend:** JavaScript, TypeScript, React, Next.js, Tailwind CSS, WebRTC
- **Backend:** Node.js, Express.js, MongoDB, MySQL, PostgreSQL, Prisma, REST APIs, JWT, FastAPI, Redis, BullMQ
- **Programming:** Java, C++, Python, Golang
- **DevOps & Tools:** Docker, Kubernetes, GitHub Actions (CI/CD), Git, NGINX, Vercel, Render, Postman, Supabase, Upstash
- **AI / LLM:** Ollama, RAG Architectures, Pinecone, LangChain, MCP Servers, LangGraph, Prompt Engineering
- **Core Concepts:** Data Structures & Algorithms, OOP, Networking, Cybersecurity Basics

## Key Projects

### Package Forge – Autonomous NPM Package Architect

- Architected a **distributed job queue system** using BullMQ and Redis to decouple the frontend from heavy compute tasks, ensuring responsive UI and preventing server timeouts.
- Implemented **ephemeral Docker-based build environments** to safely execute and validate AI-generated code before publishing.

**Stack:** Next.js 14, Node.js, Docker, BullMQ, Redis, Google Gemini | [GitHub](#) | [Live](#)

### Sentinel.ai – AI-Powered Proctoring Platform

- Designed a **real-time video streaming interface** using WebRTC to deliver low-latency monitoring experiences.
- Built frontend components that synchronized live video, alerts, and system status with backend AI inference in real time.

**Stack:** React, WebRTC, Python, FastAPI, OpenCV | [GitHub](#) | [Live](#)

### Draftify.ai – AI Web App Builder

- Engineered a **real-time code streaming UI** using Web Streams API to visualize AI-generated components instantly.
- Integrated Sandpack to securely render and preview generated React applications directly in the browser.

**Stack:** Next.js 14, Gemini API, Groq API, Sandpack, Tailwind CSS | [GitHub](#) | [Live](#)

### Hostel Committee Platform

- Developed a responsive, student-facing web interface for room booking, complaints, and announcements.
- Integrated a RAG-based AI assistant to provide instant, accurate answers to hostel-related queries.

**Stack:** React, Node.js, MongoDB, Pinecone, Gemini AI | [GitHub](#) | [Live](#)

## Education

**Bachelor of Computer Science** – Chitkara University | Expected 2027 | CGPA: 9.39

## Achievements

- Solved **200+ Data Structures & Algorithms problems** on LeetCode.
- Completed the **LeetCode 100 Days Coding Challenge**, demonstrating consistency and problem-solving discipline.

## Certifications

- CS50's Introduction to Computer Science – Harvard University
- Code in Place – Stanford University