

# Vikas Gautam

Full-Stack Developer

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[GitHub](#) | [LinkedIn](#) | [Portfolio](#) | [Hugging Face](#)

## Professional Summary

Full-Stack Developer passionate about building scalable web applications and integrating **AI** to create intelligent, high-performance user experiences.

## Technical Skills

- **Frontend:** JavaScript, TypeScript, React, Next.js, Tailwind CSS, WebRTC
- **Backend:** Node.js, Express.js, MongoDB, MySQL, PostgreSQL, Prisma, REST APIs, JWT, FastAPI
- **Programming:** Java, C++, Python, Golang
- **DevOps & Tools:** Git, Docker, NGINX, Vercel, Render, Postman, Supabase
- **AI/ML/LLM:** Ollama, LangChain, MCP Servers, LangGraph, Streamlit, Prompt Engineering, spaCy, NumPy, Pandas, matplotlib, scikit-learn, Jupyter Notebooks
- **Core Concepts:** Data Structures & Algorithms, OOP, Networking, Cybersecurity Basics
- **Soft Skills:** Excellent communication, strong problem-solving abilities, leadership (led two teams in integrated projects).

## Projects

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

- Built a full-stack AI proctoring solution to detect cheating in real time.
- Engineered a video streaming pipeline using **WebRTC** and a **FastAPI** backend.

**Technologies:** MERN Stack, FastAPI, AI/ML, Python, WebRTC | [Live](#) | [GitHub](#)

### Minerva.ai : Medical RAG Assistant

- Engineered a secure, privacy-first health assistant utilizing a **Gemini** Retrieval-Augmented Generation (RAG) architecture, ensuring diagnostic analysis is strictly grounded in user-uploaded medical reports to prevent AI hallucination.
- Implemented a zero-knowledge data flow with client-side document processing and private vector indexing in **Pinecone** (using a namespace per report) for isolated data handling and confidentiality.

**Technologies:** Next.js (TS), Gemini AI, Pinecone, LangChain.js, Tailwind CSS, Framer Motion | [GitHub](#) | [Live](#)

### NeuraPost – Autonomous AI Twitter Agent

- Developed an AI-powered automation agent that autonomously generates and posts intelligent content on **X (Twitter)**.
- Integrated **Gemini AI** with a modular **MCP-based backend** to enable contextual post generation and real-time publishing through a sleek chat interface.

**Technologies:** Next.js, Node.js, Express, Gemini AI, MCP Tool System, Twitter API v2, Framer Motion | [Live](#) | [GitHub](#)

### Hostel Committee Website

- Built a full-stack community platform to streamline hostel event management, student participation, and discussions.
- Developed a secure **room booking system** allowing students to view, reserve, and manage hostel rooms in real time.
- Implemented role-based authentication with **JWT** and integrated **Cloudinary** for scalable media management.

**Technologies:** MERN Stack, JWT, Cloudinary | [Live](#) | [GitHub](#)

## Education

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

## Certifications

- CS50's Introduction to Computer Science – Harvard
- Code in Place – Stanford
- CS50's Introduction to Cybersecurity – Harvard
- Elements of AI – University of Helsinki