

# Neelesh Kumar Rana

+91 9717624097 | [neeshrana22@gmail.com](mailto:neeshrana22@gmail.com) | [linkedin](#) | [Github](#) | [Portfolio](#)

## EDUCATION

**JIMS Engineering Management Technical Campus, GGSIPU Affiliated** Nov 2022 – July 2026  
*Bachelor of Technology in Computer Science Engineering* **8.79 CGPA**

## EXPERIENCE

**Software Engineering Intern (Remote)** Sep 2025 – Dec 2025  
*Joget Inc. (Malaysia)*

- Worked on **production-grade low-code platform** used by enterprise clients; contributed features directly to deployed software.
- Designed and implemented a **Vector Database utility** to improve semantic search and context retrieval for AI-driven workflows.
- Optimized existing internal tools, improving response time and reducing redundant API calls through better caching and query handling.
- Conducted comparative evaluation of **Weaviate Vector DB** against **Elysia AI chat workflows** to benchmark retrieval accuracy and agent responses.

**Vice President** Mar 2024 – Oct 2025  
*Hashtag Coding Society*

- Led **10+ technical events** including hackathons, workshops, and speaker sessions across campus.
- Increased member participation by **40%** through structured mentorship programs and coding competitions.
- Managed inter-college collaborations with **3+ partner institutions** for joint technical initiatives.

## PROJECTS

**AI Auto Documentation Tool** | *Python, FastAPI, Streamlit, OpenAI, FFmpeg* [Live Demo](#)  

- Built production-ready tool that automatically generates **comprehensive technical documentation** from demo videos using AI-powered video processing and LLM analysis.
- Engineered end-to-end pipeline with **frame extraction**, **audio transcription**, and **chapter segmentation**, processing videos up to 2 hours with automated timestamp generation.
- Developed **FastAPI backend** with asynchronous job queue for handling concurrent video uploads and **Streamlit frontend** for real-time progress tracking and PDF export.

**AI Criminal Sketch Matching System** | *Python, Flask, React, MongoDB, TensorFlow, OpenCV* [GitHub](#)  

- Built full-stack application for generating realistic criminal sketches from text descriptions using **Stable Diffusion** and matching them against a database of **10,000+ records**.
- Implemented **CNN feature extraction** (VGGFace) and **SVM classification** achieving **85-90% matching accuracy**; integrated **pix2pix GAN** to enhance sketch quality, improving accuracy by **15-20%**.
- Developed dual sketch creation methods: AI-powered text-to-sketch generator and drag-and-drop interface for manual composition using **React Konva** and **OpenCV**.

**Inroute** | *React.js, Express, MongoDB, Gemini* [GitHub](#)  

- Created a voice-enabled **route-finder** for differently-abled users, helping them safely navigate urban zones.
- Integrated **Gemini LLM + OpenAI APIs** for route assistance and real-time obstacle detection.
- Launched community-driven reporting system leading to **200+ obstacle reports** in 2 weeks.

## TECHNICAL SKILLS

**Languages:** Python, C/C++, TypeScript, JavaScript, SQL (PostgreSQL), HTML/CSS  
**Frameworks & Runtimes:** React, Next.js, Node.js, FastAPI, Django, Flask, Hono, WordPress  
**Libraries & Tools:** TensorFlow, OpenCV, scikit-learn, LangChain, pandas, NumPy, Framer Motion, GSAP, ShadCN/UI, Zustand, Material-UI  
**ORMs & Databases:** Prisma, Drizzle ORM, PostgreSQL, MongoDB  
**Developer Tools:** Git, Docker, GCP, VS Code, Linux, PyCharm, IntelliJ

## ACHIEVEMENTS

- Secured **Top 10 Position** among 250+ teams in national-level hackathon at **NIT Surat**, 2025.
- Got a offer of fund from a company for my project during research paper presentation.