Saurav Khanal

+91 9716357494| sauravkhanal1413@gmail.com | GitHub | LinkedIn | Kalkaji, Delhi 110019

ABOUT ME

B.Tech Computer Science student at VIT Bhopal with expertise in web development, crafted projects on React and GenAI domain. Proficient in building responsive web applications, using cloud technologies, and implementing AI solutions, with consistent contributions to group based projects projects.

EDUCATION

• VIT University, Bhopal

Oct 2022 – Oct 2026

Bachelor of technology in Computer Science and Engineering (Core)

CGPA: 8.08

• B.M.V.B(A.S.M.A)

July 2020 - May 2022

Higher Secondary (Class XII)

83%

• B.M.V.B(A.S.M.A)

May 2020

Secondary (Class X)

 $\mathbf{91\%}$

TECHNICAL SKILLS

• Programming Languages: JavaScript, TypeScript, Java, HTML5, CSS3, SQL

- Frameworks: React.js, Next.js, Tailwind CSS
- Databases: MongoDB, PostgreSQL
- GenAI & Cloud: Python, Prompt Engineering, OpenAI API, LLM Fine-tuning, RAGAWS EC2,
- Tools & Platforms: Git, Linux, GitHub,, GitHub Actions

PROJECTS AND EXPERIENCE

LinkedIn-Post-Generator - AI-Powered Content Creation Tool

[GitHub Link]

- Built a Streamlit-based LinkedIn post generator using open-source LLMs (Llama 3.2/GPT-2), achieving 90
- Implemented few-shot learning with LangChain/HuggingFace to maintain influencer-specific tone, improving stylistic consistency by 40
- Developed dynamic prompt engineering for customizable posts (topic/length/language) with 95
- Optimized system latency to i3s response time through efficient LLM integration and Streamlit caching
- Technologies: Python, LangChain, HuggingFace Transformers, Streamlit, Few-shot Learning, Prompt Engineering

MEDICOHUB AI - Healthcare Management Platform

[GitHub Link]

- Developed AI-powered symptom analyzer using React and Node.js with 85
- \bullet Built HIPAA-compliant medical records system with MongoDB Atlas encryption, reducing data retrieval time by 60
- Implemented real-time doctor-patient chat and automated PDF report generation using React-PDF, boosting workflow efficiency by 35
- Optimized Mongoose queries and indexing strategies, improving database performance by 50
- Technologies: React.js, Node.js, Express.js, MongoDB Atlas, JWT Auth, Socket.io, AWS S3

Sign Language Recognition System

- Developed real-time sign language recognition system using CNN and LSTM models with 92
- Implemented video processing pipeline with OpenCV and MediaPipe, reducing latency by 40
- Built React.js frontend with TensorFlow.js for browser-based predictions, improving accessibility
- Optimized model performance using quantization techniques, achieving 15 FPS on low-end devices
- Technologies: Python, TensorFlow, OpenCV, MediaPipe, React.js, Node.js, MongoDB

CERTIFICATIONS

- Cloud Computing NPTEL
- The Bits and Bytes of Computer Networking Coursera
- GenAI IBM

ACHIEVEMENTS

- HACKTOBERFEST 2024 Contribution: Participated in the HACKTOBERFEST hackathon with the team.
- Data Structures and Algorithms: Tackled over 125 problems on GFG.

LANGUAGES AND INTERESTS

Languages: English | Hindi

Hobbies: Football | Volleyball | Gaming