

Souraj Saha

6909475290 • Sraj12288@gmail.com • LinkedIn • GitHub

Education

Bachelor of Technology, Computer Science and Engineering

VIT Bhopal University, Bhopal, India

2022 – 2026

Kendriya Vidyalaya

Central Board of Secondary Education (CBSE)

CGPA: 8.01/10.0

Class XII, 2022

Don Bosco School

Central Board of Secondary Education (CBSE)

Percentage: 80%

Class X, 2020

Percentage: 90.4%

Technical Skills

- **Languages:** JavaScript (ES6+), TypeScript, Python, C++, SQL
- **Full-Stack Development:** React.js, Redux, Node.js, Express.js, REST APIs, HTML5, CSS3, Tailwind CSS
- **Data Science & ML:** Pandas, NumPy, Scikit-learn, Matplotlib, Jupyter Notebook
- **Databases:** MongoDB, Mongoose, MySQL
- **Tools & DevOps:** Git, GitHub, Docker (Basics), CI/CD, Vercel, Render

Experience

GEN AI Intern

November 2025 – January 2026

YBI Foundation (Remote)

- Curated and augmented a specialized dataset of 10,000+ text prompts, enhancing model training diversity and leading to a 15% improvement in output relevance.
- Fine-tuned 2 large language models (LLMs) using the Hugging Face Transformers library, achieving a 20% increase in coherence and factual accuracy over baseline models.
- Engineered a novel prompt engineering framework and evaluation pipeline using BLEU scores and human feedback, which improved task-specific response quality by 25%.
- Developed an interactive demo application using Streamlit to showcase the generative model's capabilities, enabling stakeholders to directly test and validate AI-generated content for business use cases.

Projects

MindWell | Full-Stack Mental Health Platform (MERN)

December 2024 – February 2025

– *Technologies:* React.js, Node.js, Express.js, MongoDB, JWT, Redux

[GitHub Link]

- Developed a secure full-stack mental health platform (MERN stack) that successfully onboarded 25+ users, integrating JWT authentication and personalized support features.
- Integrated user authentication and self-assessment tools, driving a 30% increase in user engagement during pilot testing phases.
- Engineered a robust RESTful API with Node.js and JWT, securing sensitive user data through encryption protocols and ensuring stateless authentication.
- Designed and optimized a responsive interface with React.js and Redux Toolkit, achieving 25% faster load times and a streamlined user navigation experience.

AI-based Predictive Maintenance for Farm Equipment

June 2025 – August 2025

– *Technologies:* Python, Pandas, Scikit-learn, Matplotlib

[GitHub Link]

- Developed a predictive maintenance solution in Python, leveraging Pandas and Scikit-learn to analyze over 10,000 sensor readings and forecast equipment failures with high precision.
- Pioneered feature engineering techniques, optimizing model inputs to achieve 92
- Architected and deployed a real-time alert system that slashed maintenance costs by 20
- Developed interactive Matplotlib visualizations to plot real-time sensor data and failure prediction scores, providing an intuitive interface for stakeholders to assess equipment health and maintenance needs.

Positions of Leadership

- Spearheaded 5+ academic software projects from conception to deployment, implementing Agile sprint planning and execution that culminated in a 100% on-time project delivery record.
- Orchestrated school-wide initiatives, guiding 40+ student teams to foster enhanced communication between students and faculty, boosting participation and collaboration across the institution.