

SOUNAK DUTTA

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EDUCATION

VIT University, India

Bachelor of Technology (B.Tech), Computer Science and Engineering

Sept 2022-July 2026

CGPA: 8.1

TECHNICAL SKILLS

Programming Languages: Java (OOP, DSA), Python

Tools & Databases: MySQL, Git/GitHub, AWS (EC2,S3)

Automation & Orchestration: n8n (Workflow Automation), Webhooks, Cron Jobs, JSON-based Pipelines

AI / GenAI & ML: GenAI, TensorFlow, Scikit-learn, NumPy, PyTorch, SpaCy, Gemini API

Web Technologies: React, Flutter, HTML, CSS, Tailwind CSS, Android Studio, REST APIs, Firebase

Certifications: GenAI using IBM watsonx, Saviynt Identity Security for AI Age, Oracle Certified Associate (OCA): Java SE 8/11

PROJECTS

Aqua Sense AI – Water Quality Monitoring Dashboard

Python, ARIMA, Javascript, Matplotlib, Chart.js

[Link](#)

- Developed a real-time dashboard to monitor 9+ water quality parameters (pH, DO, BOD, turbidity, etc.) across 44+ monitoring stations in 28 states, with automated NSF Water Quality Index (WQI) computation.
- Implemented a time-series forecasting model (ARIMA) to analyze long-term Water Quality Index trends using historical data.
- Built interactive dashboards with geographic visualizations and basic anomaly detection to analyze and validate CSV-based datasets.

PrepWell – AI Mock Interview System

Javascript, Firebase (Auth), Vapi AI, Google Gemini API, ShadCN UI

[Link](#)

- Built an AI-based mock interview platform that generates role-specific and adaptive interview questions using Google Gemini for realistic practice sessions.
- Designed configurable interviewer personas using prompt engineering to control tone, follow-up behavior during interviews.
- Integrated Vapi AI for real-time voice-based interviews, handling speech synthesis and low-latency responses.
- Developed an automated evaluation module providing structured feedback, skill-wise scoring, transcripts, and improvement suggestions for user performance tracking.

GenAI-Powered Intelligent Automation System – n8n Workflow Prototype

n8n, JavaScript, AI Agents (Mocked), Webhooks, Cron, JSON Templates, Slack/CRM/Email (Mock)

[Link](#)

- Developed a GenAI-powered automation system in n8n, automating 6+ operational stages and reducing manual effort by 65%.
- Architected 3-agent GenAI decision workflows with feedback loops to optimize automation logic over 100+ test runs.
- Generated 4+ dynamic workflow templates using GenAI-assisted automation, enabling scalable, reusable deployments.

CO-CURRICULAR ACTIVITIES & ACHIEVEMENTS

Walmart Global Tech Sparkathon: : Contributed to an open innovation challenge focused on developing technological solutions for global retail challenges.

Semi-Finalist, Flipkart GRiD 7.0: : Advanced to Round 3, led a 3-member team among 160k+ participants.

Student Event Coordinator, Robotics Club: Organized and led a robotics workshop for 70+ students, boosting club participation by 30%. Introduced event logistics and team management practices adopted for future club operations.