

Sahil Rane

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Summary

10× hackathon winner with hands-on experience building backend systems and AI-driven projects. Currently focused on deepening knowledge in backend engineering, networking, and modern AI, with growing interests in quantitative finance and scalable application development.

Education

University of Mumbai

B.Tech in Information Technology, CGPA: 8.6

Mumbai

2023–2027

Ramnarain Ruia College

Pre-University in Electronics

Mumbai

2021–2023

Experience

Deepcytes Cyberlabs (UK)

Research Analyst

Mumbai

Jul'25–Dec'25

- Spearheaded frontend development for the "CyberSafe" CMS platform focused on cybercrime intelligence and prevention
- Contributed to the Django backend architecture to support scalable and robust content delivery
- Optimized AI capabilities by refining the knowledge tree and engineering prompts for accurate data retrieval

Key Projects

Generative AI & DevOps

PRism – AI-Powered Automated Code Review Agent | GitHub

- Built a full-stack platform using FastAPI and Next.js to automate structural code reviews on GitHub pull requests with asynchronous background processing for large diffs.
- Developed an LLM-based analysis pipeline using Groq APIs with structured JSON outputs to identify security issues, bugs, and risky code patterns across pull requests.
- Integrated Discord-based ChatOps workflows for real-time review summaries, issue tracking, and developer notifications.

Agentic AI Project

Clairis – Agentic AI Form Companion | GitHub

- Built a serverless AI agent that converts traditional forms into conversational workflows using multimodal LLM interactions.
- Implemented OCR, validation logic, and adaptive follow-up handling using Gemini APIs and custom workflow orchestration in JavaScript.

Quantitative Finance & AI Project

QuantDevs – Options Pricing & AI Consultant | GitHub

- Built an American options pricing engine using Binomial Trees, optimized with Numba JIT for sub-100ms terminal execution.
- Integrated a LLaMA-3.3-70B "AI Consultant" to translate complex Greeks and risk metrics into actionable trade memos.

Research & Visualization Project

Wolfstor – AI-Powered STEM Visualizer | GitHub

- Architected a platform to solve STEM problems and generate Manim animations using Llama 3.3 (via Groq) for solving and Gemini 2.5 for visual scripting.
- Developed a robust Django backend to orchestrate image parsing via Gemini Vision, LLM reasoning, and FFmpeg-based video rendering.

Technical Skills

Languages: Python, C++, C, SQL, HTML, CSS, JS

AI/ML: PyTorch, Scikit-learn, Pandas, NumPy, Matplotlib, Seaborn, Tableau

Framework & Tools: Devops, FastAPI, Django, Excel, Git, Qiskit (Quantum Computing), n8n

Databases: MySQL, MongoDB, Database Design & Optimization

Certifications

Recent: CS50 Database (Harvard University, Apr 2025)

Programming: C Programming Specialization (Duke University, Jun 2024) • Python for Data Analysis (freeCodeCamp, Jun 2024)

Leadership & Volunteering

Technical Member: Technical Volunteer & Coordinator at SAKEC's AURUM'24 Symposium, TechExpo & Hackathon (Jan-Mar 2024)