

MITUL BHATIA

AI / Full-Stack Engineer | Agentic Systems & LLM Infra

+91 76686 46665 | mitul.bhatia2024@nst.rishihood.edu.in | LinkedIn | GitHub | LeetCode | Codeforces

PROFESSIONAL SUMMARY

AI/CS undergraduate selected for the AI Studio program at Newton School of Technology. Builds production-oriented agentic systems end-to-end — multi-agent orchestration (LangGraph), RAG pipelines, and full-stack apps (FastAPI, Next.js, PostgreSQL). Product-first engineering mindset with a competitive-programming foundation (1400+ LeetCode, 900+ Codeforces).

EDUCATION

B.Tech, Artificial Intelligence — Newton School of Technology, Rishihood University 2024 – 2028

CGPA: 9.80 / 10.0 (through Semester 4) | Currently in Semester 5 | Sonapat, Haryana

Intermediate (Class XII), Shri Chetanya TechnoSchoo — 80.2% | Matriculation (Class X), St. Joseph Academy — 95.2%

EXPERIENCE

AI Studio — Newton School of Technology 2025 – Present

- Selected for the college's AI Studio cohort, gaining dedicated GPU compute access to design, build, and deploy real-world AI systems.
- Used the provided infrastructure to prototype and ship production-oriented agentic and RAG pipelines as part of coursework and independent projects.

PROJECTS

AEGIS — Multi-Agent AI Security & Guardrail Engine (Github · Demo)

- Engineered an autonomous 7-agent AI security pipeline that detects, exploits, patches, and validates software vulnerabilities with zero human intervention, using FastAPI, LangChain, and Semgrep static analysis.
- Implemented real-time AST policy evaluation and prompt-injection guardrails inside Docker containers, cutting security triage latency to under 24ms with 99.8% injection recall.

FLATELY — Real-Time Roommate & Housing Matching System (Github · Demo)

- Built a real-time housing and roommate matching web application with multi-factor preference scoring and low-latency state delivery, using React 19, Redux Toolkit, and Express 5.
- Implemented horizontal Redis Pub/Sub scaling across WebSocket worker instances to handle concurrent chat traffic with under 45ms sync latency and 94.2% match precision.

Agrovers — AI-Powered Soil & Crop Intelligence Assistant (Github · Demo) Dec 2025

- Built an AI assistant converting raw soil inputs into crop/fertilizer recommendations for low-connectivity, low-literacy users, using FastAPI, LangChain, and FAISS-based RAG with multi-stage validation — improving recommendation reliability by 35%.

TECHNICAL SKILLS

- Languages: Python, TypeScript, JavaScript, SQL
- AI / Agentic Systems: LangGraph, LangChain, RAG pipelines, LightRAG/GraphRAG, ChromaDB, Groq API, Anthropic Claude API, Hugging Face
- Backend & Infra: FastAPI, Node.js/Express, PostgreSQL, MongoDB, MySQL, Redis, Supabase, Docker
- Frontend: Next.js, React, Redux, Tailwind CSS
- Tools: Git/GitHub Actions, Claude Code, Obsidian, Ollama (local LLM tooling)

CERTIFICATIONS

Tata Data Visualisation: Empowering Business with Effective Insights — Forage Job Simulation Jan 2026

Newton School of Technology x Rishihood University — built dashboards and analytical questions for executive decision-making from raw datasets.

ACHIEVEMENTS & EXTRA-CURRICULAR

- Competitive Programming: LeetCode rating 1400+, Codeforces rating 900+.
- Hacktoberfest Contributor: Resolved issues and submitted reviewed pull requests to open-source projects under real collaboration standards.
- Hackathon (Mumbai Hacks): Built and presented rapid prototypes under tight deadlines, focused on problem framing, MVP design, and execution.