Harsh Goutam

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Github: github.com/HarshG2005 | LeetCode: leetcode.com/u/PafrCpM6tD Mobile: +91-9798729974

Education

- **BMS Institute of Technology and Management, Bengaluru** Aug 2023 – June 2027
  Bachelor of Engineering (CSE), CGPA: 8.85
  Relevant Coursework: Operating Systems, Data Structures & Algorithms, Machine Learning, Computer Networks
- **Chasnalla Academy (CBSE), Jharkhand** 2022
  Class 12 (Science), 90.8%
- **TATA DAV Public School (CBSE), Jharkhand** 2020
  Class 10, 93.5%

Technical Skills

- **Languages:** Python (Advanced), C++, C, Java, SQL, TypeScript, JavaScript
- **Machine Learning:** Stable Baselines3, Gymnasium, LangChain, RAG Pipelines, OpenAI/Gemini API
- **Web Development:** React.js, Node.js, Express.js, TailwindCSS, Firebase, Streamlit
- **Tools & Platforms:** Git/GitHub, Linux (Bash), VS Code, Postman

Key Projects

- **Edu-Saarathi – AI-Driven Learning & Concept Mapping Platform**
  Repo: github.com/HarshG2005/Edu-Saarathi | Live Deployment
  Tech Stack: React (TSX), Node.js, Express.js, Gemini API, ShadCN/UI, Railway
  - Developed a comprehensive AI-assisted platform generating mind maps, MCQs, and summaries from user text using **Google Gemini LLM**.
  - Engineered an interactive mind-mapping interface using **React & ShadCN/UI** to visually represent knowledge and improve revision workflows.
  - Built a scalable **Node.js + Express** backend with hybrid routing to optimize latency and deployed on **Railway** for seamless CI/CD.
- **DATAVIS – Intelligent Exploratory Data Analysis (EDA) Platform**
  Repo: github.com/HarshG2005/NL2VIS
  Tech Stack: Gemini API, Express.js, React, Recharts, PapaParse
  - Developed an automated data analytics tool that transforms raw CSV/Excel datasets into interactive visualizations using **Natural Language Processing**.
  - Integrated **Gemini Pro API** with custom prompt engineering to detect anomalies, summarize trends, and generate actionable insights automatically.
  - Engineered a high-performance backend using **Node.js streams** to parse large datasets without blocking the event loop, ensuring a smooth user experience.
- **NEURONAV – Reinforcement Learning Telemetry Dashboard**
  Repo: github.com/HarshG2005/NeuroNav
  Tech Stack: Python, Stable Baselines3, WebSocket, MiniWorld Environment
  - Designed a real-time monitoring system for **Proximal Policy Optimization (PPO)** agents training in 3D virtual environments.
  - Implemented a **multi-process architecture** to decouple agent training from the visualization engine, preventing frame-rate drops during heavy computation.
  - Established a low-latency **WebSocket** connection to stream the agent's "Point of View" (POV) and reward metrics live to a web dashboard.

Achievements

- **National Finalist** – Code Red Hackathon 2025: Selected among top teams nationwide for innovative AI implementation.
- **LeetCode**: Solved 150+ Data Structures and Algorithms problems.

Volunteer Experience

- **NSS, Bengaluru** 2025
  Active participant in community service initiatives and environmental plantation drives.

Interests

- Chess, Cricket, AI Tools & Emerging Technologies

Last updated: December 7, 2025