Harsh Deep

+91 8861740457 | harshdeep7199@gmail.com | LinkedIn | GitHub | Bengaluru, Karnataka, India - 560050

PROFILE

Computer Science student with expertise in full-stack development using **Node.js** (Express.js) and Python (Flask). Worked with DevOps tools like **Git**, **Prometheus**, **Grafana** and cloud platforms like **GCP** and **AWS Amplify**. Eager to apply a strong foundation in **Software Engineering Principles** and **data-driven** strategies.

EDUCATION

B.M.S College of Engineering, Bengaluru

- B.E in CSE (Data Science) | CGPA: 8.52

Delhi Public School, Bokaro

- Class XII (CBSE | PCM) | 90.5%

Karnataka, India 2022 – Present Jharkhand, India 2020 – 2021

SKILLS

Languages: Java, C/C++, Python, JavaScript

Web Development: React.js, Tailwind CSS, RESTful APIs, Node.js (Express.js)

Databases: MySQL, PostgreSQL, MongoDB

DevOps & Cloud: Git, GCP, AWS Amplify, Alertmanager, Prometheus, Grafana, Postman

ML Technologies: Deep Learning, Computer Vision, Flask, OpenCV, MediaPipe, TensorFlow, Scikit-learn, Seaborn

CS Fundamentals: Data Structures & Algorithms, OOP, DBMS, Operating Systems, Computer Networks

EXPERIENCE

Samsung R&D Institute

Bengaluru Mar 2025 – Present

Project Intern

- Collaborating with senior engineers to design, develop, and test an on-device agent using Vision Language
 Models (VLMs) to extract and interpret TV screen content.
- Applied Salesforce BLIP model for facial recognition of Hollywood and Bollywood actors, achieving an accuracy
 of 90% in actor identification and scene localization.

Phase Shift - Technical Fest

Bengaluru

Event Coordinator

Nov 2024 - Dec 2024

- Led and coordinated a coding and data science event, demonstrating strong communication and leadership by mentoring 5 volunteers in event operations, resulting in 95% positive feedback rating from participants.

PROJECTS

API Server | GitHub | Node.js, Prometheus, Grafana, Postman

- Engineered a **Node. is** API server with a full observability stack, instrumenting 5+ key performance metrics.
- Implemented **Prometheus** to scrape **10+** metrics and standard **HTTP metrics** from the server, providing real-time performance insights across **5+ API endpoints** and improving system stability visibility by over **50%**.
- Developed 6+ Grafana dashboards with proactive alerts using Alertmanager to flag security and performance anomalies (e.g., unusual error rates, resource spikes), reducing issue identification time by 20%.

Explore Bharat | GitHub | Live Link | Express.js, REST APIs, MySQL

- Created an end-to-end full-stack travel platform, designing a responsive user interface and a scalable server-side architecture with Express.js.
- Designed a relational data model in **MySQL** and secured **RESTful APIs** using **Express.js**, ensuring reliable communication between the frontend and backend.
- Performed data analysis and performance tests to optimize server-side logic, reducing average page load time by 20%.

Fi Compass | GitHub | Python, React, Firebase, GCP, Gemini

- Architected and delivered Fi Compass, a proof-of-concept AI financial partner that shifts personal finance from reactive tracking to proactive planning.
- Orchestrated the integration of a mock data server, a React frontend, a Gemini-powered backend and a Firebase NoSQL database to deliver a complete, demo-ready proof-of-concept.
- Built and deployed a conversational **Financial Guru** using **Google's Vertex AI**, connecting it to a custom knowledge base to provide users with instant, in-app explanations of complex financial terms.

Publication

Harsh Deep et al., "IntelliMotion: Real-Time Hand Gesture and Pose Tracking Using OpenCV and MediaPipe", **IEEE** ETCC 2025, Bengaluru. | Paper Link | GitHub

ACHIEVEMENTS AND CERTIFICATIONS

- Finalist in Google Cloud Agentic AI Day Hackathon 2025, ranked in the top 7% nationwide, selected among top 704 out of 9,100+ applicants. <u>Link</u>
- Qualified Aptitude & Logical Reasoning Round of HackVega Hiring Challenge Hack Vega
- Secured 93.7% ile in Naukri Campus Young Turks Skills Contest Naukri Campus