

# HARSHAL MALANI

Nagpur, Maharashtra, India

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## Education

Shri RamdeoBaba College of Engineering and Technology

Aug 2023 – Feb 2027

B.Tech (Information Technology)

4th Semester (8.93 CGPA)

## Skills

**Programming Languages:** Python, Javascript, Typescript, Go, Rust

**Tools:** Git, Docker, Kubernetes, Linux

**ML and GenAI:** Scikit-Learn, Pandas, Matplotlib, Seaborn, LangChain, LangGraph, CrewAI

## Experience

Open Source Contributor

Mar 2025 – Present

Kubeflow

- Merged 4 PRs into the kubeflow trainer and added test coverage using Go testing framework

## Projects

**Open Deep Research** | *LangChain, LangGraph, Groq, Together* | [GitHub](#)

- Inspired by Perplexity AI's deep research, built an open, modular version focused on agentic graph execution and LLM-tool integration
- Utilized multi agent workflow with Langgraph

**AI Research Paper Analyzer** | *CrewAI, Groq, Llama-3.1(8b)* | [GitHub](#)

- Developed an AI-driven system for research paper evaluation with 100% classification accuracy
- Implemented conference recommendation logic with 60% accuracy, analyzing 150+ papers with detailed reports
- Optimized processing with 27 requests per minute, handling 25,000 input tokens and 17,000 output tokens per request

**Subscription Microservice** | *Go, Redis, Swagger, PostgreSQL, Fiber* | [GitHub](#)

- Built a scalable subscription microservice using Go with handler, service, and repository architecture patterns
- Implemented retry mechanisms and Redis caching to enhance system reliability and performance
- Integrated PostgreSQL database with Swagger API documentation for comprehensive service management
- Optimized data retrieval performance from 315ms to 2ms, achieving a 99.4% improvement in response time

**Research Hub** | *LangChain, Groq, Llama-3.1(8b)* | [GitHub](#)

- Built an innovative agentic platform where LLMs conduct expert-level research and generate academic papers from simple prompts
- Enabled seamless publication to a centralized hub, fostering collaborative discussions among researchers, similar to Stack Overflow

**Ground Water Level Analysis** | *Tensorflow, Pandas, Numpy, Matplotlib, Seaborn* | [EDA](#) | [Cleaning](#) | [Combination](#)

- Analyzed European ground water level patterns using time series models like ARIMA and SARIMAX
- Worked with large datasets from multiple ZIP files, gaining experience in data pre-processing, model training, and predictive analytics

**Saksham** | *Clerk, NextJs, MongoDB, Spacy, WireShark, Langchain, Groq* | [Web](#) | [Firewall](#) | [Live](#)

- Developed a platform for individuals and organizations, offering AI-curated blogs and personalized learning tracks
- Designed enterprise-grade security solutions, including an AI-powered firewall and intrusion detection system
- Built a network traffic classification model using the CIC dataset, achieving 98.75% accuracy
- Integrated a Threat Intelligence system with an LLM-powered chatbot (Llama-3.1 8B) for analyzing past cyberattacks

**Colosseum** | *NextJs, AccternityUI, Framer Motion* | [GitHub](#) | [Live](#)

- Developed the official webpage for Colosseum, the annual fest of the department
- Built an interactive and visually engaging website using React Three Fiber
- Designed and implemented multiple pages, including Events, About, and Registration, ensuring a seamless user experience
- Integrated Aceternity UI for a modern and responsive interface. Deployed the website on Vercel for high availability and performance