

# Rohit Yadav

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## EDUCATION

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**National Institute Of Technology, Kurukshetra**

*Bachelor of Technology in Computer Science*

Haryana

Aug 2023 – May 2027

## EXPERIENCE

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**Software Intern - Backend**

June 2025 – Aug 2025

*Lepton Software*

*Gurugram*

- Built a multi-agent AI assistant using LangGraph and Python to enable non-technical users to perform complex conversational data analysis.
- Engineered robust API integrations and orchestrated SQL queries to power dynamic, context-aware AI agent interactions.
- Developed a containerized backend service, leveraging Elasticsearch on Docker/SSH servers for high-performance similarity search and automated geocoding.

## PROJECTS

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**LegacyGraph-MCP Server** | *Python, FastMCP, Tree-sitter, NetworkX, Smithery, Docker*

March 2026

- Developed an MCP server that parses legacy C++ code into an queryable knowledge graph, processing 20k+ RPC calls and managing 10k+ agent sessions globally via Smithery observability.
- Optimized the code ingestion pipeline using multi-core distributed processing and JSON caching, accelerating AST build times by 30x to process 67,000 files with 1.15M+ nodes in under 10 minutes.
- Containerized the system using multi-stage Docker builds to support hybrid architectures, enabling seamless local stdio integration for Claude Desktop and streamable-http cloud deployments on Hugging Face Spaces.

**DemystDocs.AI** | *Python, FastAPI, React, Supabase, Google Cloud Platform, GitHub*

Sept 2025

- Built an end-to-end document intelligence platform integrating OCR, RAG, and vector search to enable scalable document processing workflows.
- Designed and delivered high-performance RESTful APIs deployed on GCP to ensure low-latency, seamless interaction with large data sets.

**AI Assistant for SmartMarket.ai** | *Python, LangGraph, LangSmith, FastAPI, SQL, Docker, GitHub*

June 2025

- Designed an autonomous multi-agent system using LangGraph to orchestrate complex multi-step reasoning across distributed APIs and databases.
- Improved data accessibility and business decision-making via an adaptive, agent-driven framework for conversational analysis.

**Intelligent Address Matching System** | *FastAPI, Python, Gemini API, Elasticsearch, React, GitHub*

July 2025

- Built a robust FastAPI backend to dynamically load and process data from Google Sheets, utilizing the Gemini API for intelligent text analysis.
- Optimized data retrieval workflows with Elasticsearch to deliver highly accurate, real-time fuzzy matching and API-driven lookup capabilities.

## TECHNICAL SKILLS

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**Languages:** Python, C/C++, Java, SQL (Postgres), HTML/CSS

**Concepts & Architecture:** RESTful APIs, Microservices, Observability (Telemetry/Metrics), Graph RAG, JSON-RPC

**Frameworks & Tools:** FastAPI, LangGraph, FastMCP, Tree-sitter, NetworkX, LangChain, React, Pandas

**Cloud & DevOps:** Google Cloud Platform (GCP), Docker, Git, Postman, Elasticsearch, Supabase, HF Spaces

**Coursework:** Data Structures & Algorithms, Machine Learning, Object-Oriented Programming, Database Management Systems, Linear Algebra

## ACHIEVEMENTS & CERTIFICATIONS

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Oracle Cloud Infrastructure 2025 Certified AI Foundations Associate

Supervised Machine Learning: Regression and Classification

Solved 550+ problems on various coding platforms