LAKSHIT UPRETI

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EDUCATION

Indian Institute of Information Technology Nagpur, *B. Tech. in Computer Science and Engineering |*
Nagpur, Maharashtra, **INDIA**   2021 - 2025

EXPERIENCE

MasterSoft, *AI Intern |* Nagpur, India   12/2024 - Present

- Built a predictive model to analyze student performance, forecasting passing and failing percentages with an accuracy of 97% on test data to assist colleges in tracking progress and focusing on at-risk students.
- Developed a Retrieval-Augmented Generation (RAG) System, enhancing scalable and efficient information retrieval.
- Implemented document life-cycle automation, including cleanup of inactive documents, archival storage, and fallback mechanisms for re-ingestion for the RAG System.
- Created an automated FAQs and Help Section generator for MasterSoft's website that:
  - Extracts all links from the homepage and scrapes data from the entire site.
  - Generates summary, help, and FAQs for each page.
  - Utilizes Olama for local and offline execution and QlOra for fine-tuning.

AccunAI, *Programming Contributor |* Remote, India   11/2024 - 01/2025

- Contributed in training Large Language Models, improving C++ and Python code generation accuracy by 20%.
- Fine-tuned and evaluated model outputs to ensure correctness and efficiency for technical use cases.

SKILLS

Languages	Python, C++, SQL
Technical	Machine Learning, Deep Learning, Generative AI, LLMs, RAG, NLP, Mathematical Optimizations, Statistics, TensorFlow, PyTorch, HuggingFace, PowerBI, MySQL.

PROJECTS

Assistant: Gemini LLM Web Application | *Link*

- Developed 4 key AI modules: Assistant for real-time responses, Image QA for image-based QA, AskMe for question-answering, and MCQ Assistant for automated PDF generation with MCQs.
- Deployed a user-friendly web-app on HuggingFace Spaces using Streamlit on a 16GB RAM CPU for easy access..
- Implemented a RAG application for document retrieval using Pinecone Vector DB with 768-dimensional embeddings.

Disha : ChatBot for IIITN | **Link**

- Created an AI-powered chatbot using fine-tuned LLMs and RAG for real-time multilingual responses.
- Engineered a scalable retrieval system, enhancing accuracy and context-awareness.
- Conducted a research and found RAG + LLM outperforms standalone models, achieving 15% higher BLEU and ROUGE scores than LLMs alone and 10% better semantic similarity than RAG alone, enhancing response quality.

Language L: Custom Programming Language and Interpreter | *Link*

- Designed a custom programming language with an intuitive and conversational syntax.
- Implemented a full-fledged interpreter, including a lexer, parser, AST, and execution engine.
- Packaged as a standalone executable for seamless script execution.

CERTIFICATIONS

Introduction to Statistics – | *Coursera(Stanford University)*	09/2023
SQL for Data Science with Python – | *Coursera(IBM)*	10/2023
Machine Learning with Python – | *Coursera(IBM)*	11/2023
Power BI Training For Data Science – | *Udemy*	02/2024

ACHIEVEMENTS

- Rated 1929 Leetcode and 3* on code chef and solved 500+ problems on different platforms.
- GATE DA with an AIR of 1981, demonstrating a solid foundation in data science and AI.
- CAT qualified with 91.4 percentile, reflecting strong analytical and quantitative aptitude.