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SUMMARY

I am a Data Science specialist with a focus on research and generative AI, leveraging AI-driven solutions to tackle complex challenges. With three years of experience in cross-platform mobile development using Flutter, I bring a diverse technical background in data science, machine learning, and generative AI. My expertise lies in designing intelligent systems that drive innovation and deliver impactful results.

PROFESSIONAL EXPERIENCE

Fusemachines Fellowship (Remote)

Jan 2023 - Dec 2023

Kathmandu, Nepal

- Completed a comprehensive program focused on machine learning and artificial intelligence, engaging in hands-on projects that enhanced skills in data analysis, model development, and algorithm implementation.
- Collaborated with industry professionals to tackle real-world challenges in AI and data science.

PROJECTS

- Multimodal MedicalBot with vision and voice: A multimodal medical assistant that accepts medical images and voice queries, understands context using LLaVA (via Groq API), and responds with voice. Combines vision and speech with OpenAI Whisper for voice-to-text to enable natural, intuitive medical interactions
- Digital Laywer Using RAG: An intelligent legal assistant using Retrieval-Augmented Generation (RAG) to deliver accurate, context-aware legal advice. It answers natural language questions by retrieving relevant legal documents and generating responses based on authentic sources.
- Research Paper Summarizer: This tool uses GenAI, Python, LangChain, Streamlit, and OpenAI to quickly summarize academic papers, helping researchers grasp key information efficiently.
- AI Agent Bot with FAST API Integration: An intelligent AI chatbot built with FastAPI and LangGraph ReAct Agents, integrating LLMs (Groq/OpenAI) and real-time web search (Tavily). It features schema validation (Pydantic), a modular backend, and a responsive Streamlit UI.
- Book Recommendation System Using Collobarative Filtering: A personalized book recommender using Collaborative Filtering and Cosine Similarity to suggest top-N books based on similar user preferences and ratings.
- Laptop Price Predictor Using Regression: A machine learning model that predicts the price of a laptop based on its specifications using Linear Regression. The model is trained on a dataset containing features like brand, processor, RAM, storage, GPU, screen size, and more.

EDUCATION

Bachelor's in Electronics and Computer Engineering

2020-2024

Thapathali Engineering Campus - Thapathali, Nepal

- Relevant Topics: C, C++, Assembly Level Programming, DSA, Numerical Method, Linear Algebra, Optimization, Control System, Probability and Statistics
- Percentage: 75.78% (as of now)

SKILLS

- Python
- TensorFlow
- PvTorch
- Hugging Face Transformers
- LangChain
- Pinecone (Vector Databases)
- LlamaIndex
- AWS Bedrock
- OpenAI Gemini
- Natural Language Processing (NLP)

CERTIFICATIONS

- Microdegree TM in Machine Learning (Fusemachines)
- Semi-Finalist, Hult Prize (2022) 2023)
- Q Bronze by Q World
- Certificates from Coursera for Python and Machine Learning (Andrew Ng)

LANGUAGES

C, C++, Python, Julia, Dart

PUBLICATIONS

• UnderGrad Major Project Integrating machine learning and RAG-based chatbot for Mandarin orange disease detection in hilly region of Nepal