Nischal Chandur

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SUMMARY

Machine Learning Engineer and Data Scientist with 2+ years of experience designing robust, end-to-end ML systems with a focus on LLMs, agentic reasoning, and real-world data integration. Hands-on expertise with transformer models, LangChain, FAISS, vector search, and scalable cloud pipelines. Demonstrated ability to apply Bayesian inference, ensemble methods, and deep learning to diverse problem domains. Committed to building accurate, transparent, and ethical AI systems that are production-ready and user-aligned.

EXPERIENCE

Data Science Graduate Intern, Ecolab – Naperville, IL, USA   06/2024 – 08/2024
- Built a RAG-based chatbot in Azure AI Studio enabling store managers to upload spreadsheets and query KPIs like revenue, product usage, and reviews.
- Created an LLM assistant for field agents to resolve machine issues by retrieving steps from manuals and past incidents.
- Designed intuitive UIs and handled data cleaning to support natural language querying over structured/unstructured data.

Machine Learning Engineer, Reworked.ai – Miami, FL, USA   04/2024 – 05/2024
- Developed a custom ML pipeline using Bayesian inference and ensemble learning to predict solar panel adoption likelihood, improving targeting and lead generation.
- Integrated scalable deployment of predictive models using geospatial and demographic features, supporting strategic business growth through data-informed insights.

Data Scientist, Latlong – Bengaluru, KA, India   09/2022 – 06/2023
- Built a multilingual OCR-NLP pipeline to extract structured data from public documents, incorporating text preprocessing, optical character recognition, and entity extraction for demographic analytics.
- Applied geospatial and behavioral modeling to assess repayment risk for NBFCs, improving credit scoring models through data fusion of internal and location-based metrics.
- Correlated sales data with regional demographic insights using spatial data engineering, enabling targeted marketing strategies for a leading automotive client.

PROJECTS

Lorekeeper – RAG-based Q&A System, University of Maryland   08/2024 – 12/2024
- Developed a Retrieval-Augmented Generation (RAG) system using Llama 3.2:1b, integrating LangChain with FAISS vector search for context-aware QA over book corpora.
- Engineered chunking, embedding, and intelligent indexing pipeline to enable real-time information retrieval from long documents.
- Built a Streamlit front-end with interpretability features including source traceability and response explanation, enhancing LLM usability and trust.

NBA Game Outcome Predictor & Analytics Dashboard, University of Maryland   08/2023 – 12/2024
- Designed an end-to-end ML pipeline to forecast NBA outcomes using ensemble models trained on 40+ years of player and team data, emphasizing feature engineering and explainability.
- Developed a Flask-based dashboard providing live predictions, player stats, and interactive analytics, showcasing skills in model deployment, visualization, and RESTful API integration.

EDUCATION

University of Maryland, College Park, MD, United States   08/2023 – 05/2025
GPA: 3.9
Coursework: Natural Language Processing, Computer Vision, Big Data Systems, Algorithms for Data Science

SKILLS

LLMs: LangChain, LangGraph, Hugging Face, Llama, Sentence Transformers
ML & Deep Learning: PyTorch, TensorFlow, Scikit-learn, Keras, XGBoost, Bayesian Inference, Ensemble Learning, OCR
Vector Search & NLP: FAISS, ChromaDB, SpaCy, Sentence Transformers, RAG Systems
Software & Dev Tools: Python, R, C/C++, Go, Flask, Streamlit, REST APIs, Git/GitHub, Tableau, CI/CD, Unix
Data Engineering & Deployment: AWS, Azure, Docker, Spark, Hadoop, Dask, Databricks, PostgreSQL, MongoDB, Redis