

Nischal Chandur

Data Scientist • Machine Learning Engineer • AI & Predictive Modeling Expert

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SUMMARY

Graduated from the University of Maryland with a focus on building and deploying reliable machine learning systems from end to end. Experienced across the full ML lifecycle, from data ingestion and modeling to deployment using tools like PyTorch, Scikit-learn, AWS, and Docker. Brings a systems-oriented mindset and has applied it to real-world problems in anomaly detection, geospatial analytics, and NLP, with an emphasis on performance, resilience, and long-term maintainability.

EXPERIENCE

Data Science Graduate Intern, Ecolab – Naperville, IL, USA

06/2024 – 08/2024

- Improved anomaly detection for cooling towers by integrating ARIMA with k-shape clustering, increasing precision by 32% and enabling earlier issue detection, which lowered maintenance costs.
- Built a Python-based algorithm to simulate over 10,000 sensor readings per second, generating realistic test data to improve model robustness and reliability under real-world conditions.

Machine Learning Engineer, Reworked.ai – Miami, FL, USA

04/2024 – 05/2024

- Designed a hybrid machine learning pipeline that used Bayesian decision models and ensemble techniques to predict solar panel adoption likelihood, improving lead targeting and reducing marketing spend.
- Created a neighborhood-based lead scoring system that improved conversion rates by 17% and helped sales teams focus efforts on high-value prospects.

Data Scientist, Latlong – Bengaluru, KA, India

09/2022 – 06/2023

- Built an automated OCR pipeline using PyTesseract to extract multilingual demographic data across Indian regions, helping businesses gain actionable location insights.
- Built a Python-QGIS dashboard that visualized geographic performance, helping financial and automotive clients reallocate resources more effectively.
- Embedded geo-spatial analytics into business KPIs, providing insights that directly supported client expansion into high-performing regions.

PROJECTS

Lorekeeper – University of Maryland

08/2024 – 12/2024

- Built a custom RAG model tailored to *The Lord of the Rings* and *The Hobbit* using LangChain and FAISS, improving text retrieval accuracy by 28%.
- Created a user-friendly Streamlit app that allows real-time querying of the dataset, making literary insights more accessible to researchers and fans.

NBA Prediction & Analysis Model – University of Maryland

08/2023 – 12/2023

- Developed a game prediction model using ensemble learning, reaching 75% accuracy and supporting data-driven strategies for fans and analysts.
- Built a real-time Flask dashboard that visualized game stats and insights, enhancing engagement for sports analysts and enthusiasts.

EDUCATION

University of Maryland, College Park, MD, USA

08/2023 – 05/2025

GPA: 3.85

Coursework: Natural Language Processing, Computer Vision, Big Data Systems, Algorithms for Data Science

SKILLS

Python, PyTorch, TensorFlow, Scikit-learn, HuggingFace, Docker, Amazon Web Services (AWS), Databricks, Git/GitHub, Keras, LangChain, Streamlit, Flask, Django, React.js, PostgreSQL, MongoDB, FAISS, ChromaDB, Spark, Hadoop, Dask, OpenCV, SpaCy, NLTK, R, MATLAB, C/C++, Go, Node.js, Redis, Neo4j