Nischal Chandur

College Park, MD | 858-241-6448
chandur.nischal2@gmail.com | nchandur.github.io/portfolio | linkedin.com/in/nchandur | github.com/nchandur

SUMMARY

Data Scientist with over 2 years of experience crafting machine learning models that are high-performing, scalable and robust. Expertise in developing end-to-end ML pipelines across domains like time-series forecasting, anomaly detection, and NLP, using tools like PyTorch, TensorFlow, and AWS. Committed to building models that are accurate and practical for real-world applications, with a strong focus on transparency for users and ethical data usage. Seeking to drive impactful change by creating AI systems that are both powerful and responsible.

EXPERIENCE

Data Science Graduate Intern, Ecolab – Naperville, IL, USA **06/2024 – 08/2024**

- Analyzed outputs from time-series anomaly detection models and field agent action logs to construct a comprehensive validation dataset, enabling accurate performance assessment of deployed ML systems.
- Developed a robust synthetic data generation algorithm to simulate real-world sensor anomalies, reducing reliance on rare field events and accelerating model validation.

Machine Learning Engineer, Reworked.ai – Miami, FL, USA **04/2024 – 05/2024**

- Engineered a custom machine learning model using Bayesian inference and ensemble techniques to predict solar panel adoption likelihood based on demographic and environmental features.
- Enabled targeted lead generation and sales strategy by providing address-level adoption probabilities, supporting customer acquisition and market expansion efforts.

Data Scientist, Latlong (ONZE Technologies Pvt. Ltd.) – Bengaluru, KA, India **09/2022 – 06/2023**

- Built a multilingual OCR-based data extraction pipeline to parse public documents for demographic insights, integrating them with proprietary geospatial data for advanced analytics.
- Analyzed customer repayment behavior for a major NBFC by combining internal and geospatial data, revealing regional success patterns and enabling improved risk assessment.
- Delivered strategic sales insights to a leading automotive client by correlating store performance with demographic and regional data, driving targeted marketing and expansion efforts.

PROJECTS

Lorekeeper – RAG-based Q&A System, University of Maryland **08/2024 – 12/2024**

- Developed a Retrieval-Augmented Generation (RAG) system using The Lord of the Rings and The Hobbit texts, integrating vector search with Llama 3.2:1b to answer user queries with contextual precision.
- Processed and chunked PDF text intelligently, filtered non-content sections, and embedded data using optimized vector models stored in FAISS for high-relevance retrieval.
- Built an interactive Streamlit front-end with query response explanations and source transparency, enhancing user trust and interpretability of generated answers.

NBA Game Outcome Predictor & Analytics Dashboard, University of Maryland **08/2023 – 12/2024**

- Built an end-to-end predictive pipeline to forecast NBA game outcomes using ensemble ML models trained on historical team and player performance data from 1980 to present.
- Developed a Flask-based web application displaying daily matchups, predictive insights, and player/team analytics, creating a comprehensive and interactive NBA resource.

EDUCATION

University of Maryland, College Park, MD, United States **08/2023 – 05/2025**

GPA: 3.85

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

SKILLS

Python, R, C/C++, Go, PyTorch, TensorFlow, Scikit-learn, Keras, XGBoost, Hugging Face, SpaCy, Sentence Transformers, Large Language Models, Feature Engineering, AWS, Docker, Databricks, PostgreSQL, MongoDB, Redis, FAISS, ChromaDB, Spark, Hadoop, Dask, Flask, Streamlit, REST APIs, Git, GitHub, Tableau, Jupyter, SQL, EDA, Model Deployment, CI/CD