Nischal Chandur

College Park, MD | +1(858)-241-6448 | chandur.nischal2@gmail.com | nchandur.github.io/portfolio
linkedin.com/in/nchandur | github.com/nchandur

Summary

Aspiring Data Scientist with experience as a Data Science and Machine Learning. Skilled in enhancing anomaly detection models and developing synthetic data generation algorithms, with a focus on improving model precision and robustness. Successfully designed ML pipelines and data-driven strategies to optimize lead targeting and conversion rates. Eager to leverage technical expertise and innovative solutions to drive impactful data science projects.

Technical Skills

Machine Learning & AI: TensorFlow | Keras | Scikit-learn | PyTorch | HuggingFace | OpenCV | LangChain | SpaCy | NLTK
Probability & Statistics: Bayesian Inference | Causal Inference | Hypothesis Testing | Simulation Testing
Programming Languages: Python | R | MATLAB | C/C++ | Go | Node.js
Databases & Big Data: PostgreSQL | MySQL | MongoDB | FAISS | ChromaDB | | Pinecone | Snowflake | Apache Spark
Cloud Computing & Dev Ops: Amazon Web Services (AWS) | Microsoft Azure | Databricks | Docker | Git/GitHub
Other Tools: PyTesseract | Streamlit | Flask | Gin | Fiber | React.js

Professional Experience

Data Science Graduate Intern, Ecolab – Naperville, IL, USA — Jun 2024 – Aug 2024

- *Enhanced anomaly detection models* for cooling towers by integrating ARIMA and k-shape clustering, *boosting precision by 32%*, leading to proactive issue identification and reduced maintenance costs.
- *Developed a high-throughput synthetic data generation algorithm* in Python, simulating *10,000+ sensor readings per second* to create realistic operational test cases, strengthening model robustness.

Machine Learning Engineer, Reworked.ai – Miami, FL, USA — Apr 2024 – May 2024

- *Designed a hybrid ML pipeline* combining Bayesian decision models and ensemble learning to predict *solar panel installation likelihood*, optimizing lead targeting and *reducing marketing costs*.
- *Implemented a data-driven lead acquisition strategy* using neighborhood-specific scoring, *improving conversion rates by 17%*, increasing sales efficiency, and refining customer segmentation.

Data Scientist, Latlong (ONZE Technologies Pvt. Ltd.) – Bengaluru, KA, India — Sep 2022 – Jun 2023

- *Automated multilingual data extraction* using PyTesseract OCR, enabling *demographic analytics* across multiple Indian regions, improving decision-making for location-based insights.
- *Developed a Python-QGIS visualization platform* to identify underperforming geographic areas, *empowering financial and automotive firms* to optimize resource allocation.
- *Integrated geo-spatial intelligence* into key business performance indicators, leading to *strategic expansions* for clients.

Academic Projects

Lorekeeper – University of Maryland, College Park — Aug 2024 - Dec 2024

- *Developed a Retrieval-Augmented Generation (RAG) model* using LangChain, HuggingFace, and FAISS, improving text retrieval accuracy by *28%* for large-scale literary corpora from The Lord of the Rings and The Hobbit.
- *Built an interactive Streamlit interface*, enabling *seamless user queries and real-time knowledge retrieval*, enhancing accessibility for literary research. github.com/nchandur/lorekeeper

NBA Prediction & Analysis Model – University of Maryland, College Park — Aug 2023 - Dec 2023

- *Built a predictive analytics pipeline* leveraging ensemble learning, achieving *75% accuracy* in forecasting NBA game outcomes for data-driven decision-making.
- *Developed a real-time Flask dashboard*, visualizing *key match statistics and game insights*, increasing engagement for sports analysts and fans. github.com/nchandur/NBA-prediction-model

Education

University of Maryland, College Park, MD, USA — Aug 2023 – May 2025
Master of Science in Data Science
Coursework: Natural Language Processing | Computer Vision | Big Data Systems | Algorithms for Data Science

PES University, Bengaluru, KA, India — Aug 2018 – May 2022
Bachelor of Technology in Electronics & Communication Engineering
Coursework: Engineering Mathematics | Linear Algebra | Random Processes | Artificial Neural Networks | Pattern Classification