Nischal Chandur

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Summary

Data scientist with experience delivering end-to-end ML solutions from data ingestion to deployment. Proficient in modeling, cloud platforms, and production tools like Docker, REST APIs, and CI/CD. Combines statistical rigor with engineering to build scalable, interpretable, and resilient systems. Proven impact across domains including anomaly detection, geospatial analytics, and NLP. Focused on operationalizing ML models that are accurate, robust, and business-aligned.

Technical Skills

Machine Learning & AI: TensorFlow | Keras | Scikit-learn | PyTorch | HuggingFace | OpenCV | LangChain | SpaCy | NLTK
Probability & Statistics: Bayesian Inference | Causal Inference | Hypothesis Testing | Monte Carlo Methods
Programming Languages: Python | R | MATLAB | C/C++ | Go | Node.js
Databases & Big Data: PostgreSQL | MongoDB | Redis | FAISS | ChromaDB | Neo4j | Spark | Hadoop | Dask
Cloud Computing & Dev Ops: Amazon Web Services (AWS) | Microsoft Azure | Databricks | Docker | Git/GitHub
Web Frameworks & Libraries: Streamlit | Flask | Django | 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 *specialized Retrieval-Augmented Generation (RAG) model* for The Lord of the Rings and The Hobbit, using LangChain, HuggingFace, and FAISS, boosting text retrieval accuracy by *28%*.
- *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