

Nischal Chandur

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Summary

Graduate student with a strong foundation in data modeling, computer vision, and NLP, complemented by skills in software development, cloud computing, and database management. Dedicated to making AI accessible and intuitive by bridging the gap between complex AI systems and everyday users through transparent and ethical data usage. Committed to clear and honest data communication to foster trust and understanding across both technical and non-technical audiences.

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