Nischal Chandur

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Experience

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

- Enhanced anomaly detection in AI models by performing time series analysis on sensor data (temperature, pH, conductivity) and applying techniques like ARIMA and k-shape clustering to distinguish normal from anomalous patterns in the behavior of cooling towers.
- Developed a synthetic data generation algorithm to create controlled sensor readings, enabling robust model validation and boundary testing, backed by a curated dataset of historical anomalies for comprehensive model assessment.

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

- Designed a custom hybrid ML model combining Bayesian Decision models and random forest classifiers to predict solar panel installation likelihood, utilizing engineered features such as age, income, roof area, and sunlight exposure.
- Generated actionable leads for solar panel installations by identifying high-potential neighborhoods, optimizing targeting strategies for residential solar adoption based on model-driven likelihood scores.

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

- Built a data extraction tool using Pytesseract OCR to process demographic data from multilingual public documents, integrating results with geo-spatial data for insightful regional analysis.
- Developed a Python and QGIS-based visualization tool enabling companies to identify underperforming areas and competitor-dominated regions, delivering actionable insights that boosted operational efficiency and profitability across sectors like finance and automotive.

Projects

Sign Language Recognition & Translation – University of Maryland, College Park — Mar 2024 - May 2024

Developed a sign language recognition and translation platform utilizing a custom CNN that achieved 96% validation accuracy, allowing users to upload gesture images and input text for fingerspelling, all integrated into a Flask web application deployed globally via ngrok. github.com/chandurnischal/sign-language

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

Created an end-to-end data science pipeline that predicts NBA game outcomes using historical data, feature engineering with advanced metrics, and a Random Forest Classifier with 75% validation accuracy, all presented through a Flask web application displaying daily match statistics and win probabilities. github.com/chandurnischal/NBA-prediction-model

Technologies

Data Science & Machine Learning: scikit-learn | Tensorflow/Keras | SpaCy | NLTK | Pytesseract | OpenCV | Plotly | Matplotlib/Seaborn

Languages: Python | R | MATLAB | Go | C/C++ | HTML/CSS | JavaScript

Databases & Big Data: PostgreSQL | MySQL | MongoDB | Snowflake | Kafka

Cloud Computing & Dev Ops: Amazon Web Services (AWS) | Microsoft Azure | Databricks | Docker | Git/GitHub

Web Development: React.js | Flask | Django | ngrok | Gin | Fiber

Education

University of Maryland, College Park, MD, MS in Data Science — Aug 2023 – May 2025
Coursework: Natural Language Processing | Computer Vision | Data Representation & Modeling | Communication in Data Science & Analytics

PES University, Bangalore, India, B.Tech in Electronics & Communication Engineering — Aug 2018 – May 2022
Coursework: Natural Language Processing | Computer Vision | Data Representation & Modeling | Communication in Data Science & Analytics