Lakesh Kumar Suryadevara

Data Scientist | Python • Machine Learning • NLP
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SUMMARY

M.S. Data Science candidate (May 2025) with experience designing and deploying predictive models from problem definition through business impact, developing end-to-end machine learning pipelines, and translating complex data into actionable insights. Skilled in Python, SQL, and modern ML frameworks to solve problems across classification, regression, NLP, and time series forecasting. Adept at collaborating with cross-functional teams to define objectives, communicate findings clearly, and deliver measurable business value through data-driven decision making.

SKILLS

Machine Learning & Modeling: Predictive modeling, regression, classification, time series forecasting, deep learning (CNNs, Transformers), NLP sentiment analysis, anomaly detection, model validation (cross-validation, A/B testing), hyperparameter tuning
Programming & Frameworks: Python (pandas, scikit-learn, TensorFlow, PyTorch), SQL, R, PySpark, Kafka (stream processing), Flask
Data Engineering & Pipelines: End-to-end data pipeline development, real-time data simulation and ingestion, stream processing (Kafka, PySpark), data transformation, batch loading, data warehousing (SQLite)
Data Analysis & Visualization: Exploratory data analysis (EDA), feature engineering, metric design, model evaluation, dashboarding with Flask, Power BI, Tableau, Matplotlib
Deployment & DevOps: Docker, docker-compose, container orchestration for reproducible environments, performance monitoring, iterative system improvements
Mathematics & Statistics: Linear algebra, calculus, probability, hypothesis testing, regression analysis, time series decomposition
Communication & Business Impact: Clear written and verbal communication, data storytelling, development of real-time dashboards and executive-ready reports, alignment with operational KPIs and business goals

EDUCATION

University of Memphis, Memphis, TN Master of Science in Data Science | GPA: 3.5/4.0 | May 2025
SRM University, Andhra Pradesh, India Bachelor of Technology in Electronics & Communication Engineering | December 2021

PROJECTS

Financial News Sentiment Analysis

Technologies: FinBERT, Streamlit

- Developed an AI-driven business intelligence dashboard to analyze sentiment from over 500 financial headlines daily.
- Improved sentiment analysis accuracy by 20%, enabling product teams to respond to market sentiment and support revenue-driven decisions.

Real-Time Data Center Monitoring & Anomaly Detection System

Technologies: Python, Kafka, Flask, SQLite, Docker

- Simulated real-time data from 50+ virtual IoT devices, generating thousands of sensor readings daily using Python and Kafka, and calculated key metrics like Power Usage Effectiveness (PUE).
- Built a stream processing pipeline with Python to detect anomalies (e.g., overheating, CPU spikes) with >90% accuracy, and stored results in a SQLite database for historical analysis.
- Developed a live Flask dashboard to visualize power and temperature trends, auto-refreshed every 30 seconds, and containerized the system using Docker for easy local deployment.

Economic Indicators Dashboard

Technologies: Power BI, Tableau, FRED API

- Built a real-time, interactive dashboard integrating macroeconomic and financial data to visualize trends and risk indicators.

- Automated data workflows, reducing manual reporting time by 40% and improving stakeholder decisionmaking.

Brain Tumor MRI Classification

Technologies: TensorFlow, CNN

- Engineered a deep learning Convolutional Neural Network achieving 99% accuracy on 7,000 MRI images for medical image classification.
- Optimized model training, reducing computational time by 30% while maintaining predictive performance.

Crop Yield Forecasting

Technologies: XGBoost, Satellite Data

- Designed an XGBoost model to predict crop yields using multi-source satellite datasets ($R^2 = 0.92$).
- Enabled agronomists to optimize resource allocation, reducing waste by 15% and improving operational planning.

EXPERIENCE

Full Stack Developer, FITPAA | Hyderabad, India | April 2021 – July 2023

- Built Python programs that shared machine learning predictions with our main health app, boosting user engagement with health goal tracking by over 15%.
- Set up and managed systems to collect, clean, and prepare gigabytes of user health data daily. I used Python tools like Pandas and NumPy to get the data ready for analysis, reducing preparation time by 20%.
- Wrote efficient SQL code to get important data from our databases, which helped both the app work smoothly and supported over 10 key business reports for smarter choices.
- Created and tested machine learning models (using scikit-learn) that could predict things like if users would stick to their health plans, achieving 85% prediction accuracy and helping us offer personalized advice.
- Worked closely with different teams (like product and engineering) in a flexible way to turn their ideas into 5+ new data-driven features that helped users with their health and fitness.
- Made easy-to-understand reports and charts for various teams, including 3 core dashboards, showing how users were doing and helping everyone make better plans based on our data 10% faster.

CERTIFICATIONS

- Fine Tuning for LLMs (LinkedIn) – 2025
- Complete Guide to Python Fundamentals for MLOps (LinkedIn) – 2025
- Python Data Analysis (LinkedIn) – 2024
- Networking Basics (Cisco) – 2024