# LAKESH KUMAR SURYADEVARA

Memphis, TN | 901-679-0389 | suryadevaralakesh99@gmail.com | lakeshsuryadevara.com

#### **SUMMARY**

Data Scientist with 3 years of experience driving measurable business impact through scalable machine learning solutions and data infrastructure. Expertise in building end-to-end data pipelines processing 1TB+ daily data and deploying predictive models that improved user outcomes by 30%+. Proven track record in healthcare analytics, cloud architecture (AWS, Snowflake), and translating complex data insights into actionable business strategies across cross-functional teams.

#### **EXPERIENCE**

## FITPAA | Hyderabad, India

Data Scientist | June 2020 - July 2023

- Engineered end-to-end data infrastructure for Fitpaa's AI-driven Metabolism Monitoring Technology platform, processing 1TB+ daily user data using AWS S3, PySpark, and Apache Airflow with 99.9% uptime and 40% reduction in processing time
- Developed machine learning models using TensorFlow, scikit-learn, and PySpark on 100,000+ behavioral sessions to power Real-Time Guidance technology, improving user adherence by 30% and goal completion by 25% through predictive analytics
- Built scalable ETL pipelines with SQL, Python, and Pandas to transform 50,000+ user profiles across 20+ health metrics for personalized Fitpaa Capsule recommendations, achieving 95% accuracy in nutrition and exercise therapy matching
- Designed and deployed real-time analytics dashboards in Power BI to monitor metabolism assessments, health outcomes, and user engagement metrics, supporting 150% growth to 500,000+ active members
- Implemented Snowflake data warehousing architecture enabling sophisticated A/B testing framework across multiple chronic disease management programs (diabetes, PCOS, hypertension, fatty liver), increasing retention by 28% for 15,000+ users.
- Conducted advanced regression analysis on anonymized health datasets of 20,000+ users to measure clinical
  efficacy of Medical Nutrition Therapy (MNT) protocols, contributing to 35% reduction in HbA1c levels for
  diabetes patients
- Performed comprehensive analytics using Tableau and Excel on 10,000+ user cohorts to identify behavioral
  patterns and health trends across lifestyle disease categories, delivering 10+ weekly reports that reduced
  decision-making cycles by 15%
- Collaborated with cross-functional teams including fitness planners, nutritionists, exercise scientists, and
  physicians to translate complex data insights into actionable product improvements for digital therapeutic
  solutions
- Presented 15+ technical reports on machine learning models, data infrastructure, and clinical outcomes to stakeholders, driving evidence-based enhancements to Fitpaa's cognitive behavioral therapy-based intervention platform

## **EDUCATION**

# University of Memphis | Memphis, TN

Master of Science in Data Science | May 2025

Relevant Coursework: Machine Learning, Artificial Intelligence, Software Engineering, Large Language Models, Data Analysis

## SRM University | Andhra Pradesh, India

Bachelor of Technology in Electronics and Communication Engineering | May 2021

#### SKILLS

**Programming & Tools:** Python (Pandas, NumPy, TensorFlow, Scikit-learn, PySpark), R, SQL, Apache Airflow, Git/GitHub, Jupyter, Excel (Power Query), Flask, REST APIs

**Data Science & Machine Learning:** Predictive Modeling, Deep Learning, NLP, AI Model Development, Clustering, Regression Analysis, Feature Engineering, Data Mining, A/B Testing, Model Validation

**Cloud & Big Data:** AWS (S3, EC2), Apache Spark, PySpark, Snowflake Data Warehousing, Distributed Computing, Real-Time Data Processing

**Data Engineering:** ETL Pipeline Development, Data Architecture, Data Governance, Workflow Orchestration (Apache Airflow), Data Integration, Performance Optimization

Databases: MySQL, PostgreSQL, MS SQL Server, Snowflake, Data Warehousing Solutions

**Data Visualization & BI:** Looker, Tableau, Power BI, Matplotlib, Seaborn, Dashboard Development, Real-Time Analytics

**Data Management:** Data Cleaning & Transformation, Statistical Analysis, Data Quality Assurance, Metadata Management, Data Pipeline Monitoring

**Healthcare Analytics:** Medical Nutrition Therapy (MNT) Analytics, Clinical Outcomes Analysis, Health Metrics Tracking, Behavioral Analytics, Digital Therapeutics Data

**Soft Skills:** Analytical Thinking, Cross-Functional Collaboration, Stakeholder Communication, Technical Presentation, Research Methodology, Problem-Solving

## **PROJECTS**

## **Crop Yield Forecasting Model**

- Developed and validated a machine learning model using XGBoost and Python to predict crop yields with over 95% accuracy.
- Integrated various data sources, including environmental and satellite data, to enhance the model's predictive power for agricultural planning and optimization.

# Cryptocurrency Market Analytics Dashboard

- Engineered a real-time cryptocurrency market dashboard using Power BI to provide up-to-the-minute volatility analysis and trading volume metrics.
- Integrated SQL and Python scripts with REST APIs to pull and process live market data.
- Designed interactive asset comparison tools and trend analysis features to enable data-driven trading decisions.

# Financial News Sentiment Analyzer

- Developed a sentiment analysis tool utilizing FinBERT and Natural Language Processing (NLP) to process over 500 financial headlines daily.
- Built a user-friendly web dashboard using Streamlit in Python, which delivered actionable trading insights and automated trend alerts.

### Brain Tumor Classification from MRI Scans

- Trained and fine-tuned a convolutional neural network (CNN) model using TensorFlow and Keras on a dataset of over 7,000 MRI scans.
- Achieved a high classification accuracy of 99%, demonstrating proficiency in deep learning model development.
- Optimized model training speed by 30% and significantly reduced prediction errors by 35%.

## **Economic Indicators Dashboard**

- Constructed a dynamic macroeconomic dashboard in Power BI using data from the FRED API in R.
- Implemented automated data refresh capabilities, reducing the manual reporting workload by 40% and improving overall forecasting accuracy.

#### **CERTIFICATIONS**

- Intro to Snowflake for Devs, Data Scientists, Data Engineers
- Fine Tuning for LLMs (LinkedIn Learning)
- Complete Guide to Python Fundamentals for MLOps (LinkedIn Learning)
- SAS Essential Training Research (LinkedIn Learning)