

# Lakshmi Priya K

## DATASCIENCE STUDENT

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### PROFESSIONAL SUMMARY

Postgraduate student in Data Science with hands-on experience in Python, machine learning, and AI model development. Skilled in data preprocessing, XGBoost, MLP, and CNNs, with a strong interest in solving real-world problems through data-driven solutions.

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**Location :** Chennai,  
Tamilnadu, India

### EDUCATION

- **Master of Science in Data Science | 2024-2026**  
Sastra Deemed University
- **Bachelor of Science in Computer Science | 2021-2024**  
Meenakshi College for Women, 80%
- **HSC | 2019-2021**  
Don Bosco Matriculation Higher Secondary School, 89.4%
- **SSLC | 2018-2019**  
Don Bosco Matriculation Higher Secondary School, 89.4%

### SKILLS

- Strong Communication
- Analytical Skills
- Problem Solving Skills

### PROJECTS

#### Climate-Aware Energy Demand Forecasting Using Weather Data

- Built a machine learning model to forecast energy demand using only weather features (temperature, humidity, wind speed, etc.).
- Achieved an  $R^2$  score of 0.995 using XGBoost Regressor and classified peak grid stress events with 99.4% accuracy using MLP Classifier.
- Focused on making smart grid forecasting scalable without internal sensor data.
- Tools: Python, Scikit-learn, CNN, LightGBM, Pandas

#### Grid Stress Classification Based on Simulated Demand

- Engineered a binary classification system to identify high-demand ("grid stress") periods from simulated data.
  - Applied Logistic Regression, Random Forest, XGBoost, and LightGBM classifiers.
  - Evaluated models using Accuracy, Precision, Recall, and F1-Score metrics; MLP and LightGBM performed best.
  - Tools: Scikit-learn, Matplotlib, NumPy, Jupyter Notebook
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