

# SUSHMITA MALAKAR

DATA SCIENCE ENTHUSIAST

9818085057 | sushmalakar10@gmail.com | Satungal, Kathmandu

[www.linkedin.com/in/sushmita-malakar-a3a5a9247](https://www.linkedin.com/in/sushmita-malakar-a3a5a9247)

[www.github.com/sushmitamalakar10](https://www.github.com/sushmitamalakar10)

---

## ABOUT ME

I am passionate and motivated in Data Science. I have completed hands-on projects using Python and basic machine learning techniques. I am confident in data cleaning, exploration and visualization. I am eager to apply my skills and continue learning through real-world experience. I am especially interested in gaining practical knowledge by working on meaningful projects in a collaborative environment.

## SKILLS

Languages & Tools    Python, SQL, Pandas, NumPy, Matplotlib, Seaborn, Scikit-learn, Jupyter Notebook, Google Colab, GitHub, Flask

Data Skills            Data Cleaning, EDA, Regression, Classification, Data Visualization, Data Analysis

Soft Skills

## PROJECTS

### Menstrual Cycle Predictor

- Built ML model to predict days left until the next period and the next-period date using 17,976 records and inputs such as last period date, previous cycle length, mood/stress, sleep, pain level, flow level and PMS symptoms.
- Compared multiple models (Linear Regression, Decision Tree, Random Forest, XGBoost) with an 80/20 train-test split, and measured results using MAE, RMSE, and  $R^2$ .
- Improved performance by tuning XGBoost, reaching MAE 1.44 days, RMSE 1.99 days,  $R^2$  0.31.
- Saved the best trained model with Joblib and integrated it into Streamlit for prediction.

### Customer Churn Prediction

- Built a telecom customer churn classifier on 7,043 records using 19 processed features; cleaned data, encoded categorical variables, and handled imbalance with SMOTE.
- Trained and compared tree/ensemble models, achieving best results with a tuned Random Forest: test accuracy 0.784, churn class F1-score 0.61 (also evaluated tuned Gradient Boosting: accuracy 0.773, churn F1 0.63; tuned Decision Tree: accuracy 0.734, churn F1 0.57).

## CERTIFICATIONS

### Python Data Science Fundamentals

[www.udemy.com/certificate/UC-75aa8feb-5aa2-4f41-a8dc-f36b8d38b167/](https://www.udemy.com/certificate/UC-75aa8feb-5aa2-4f41-a8dc-f36b8d38b167/)

2025

### Python Numpy Data Analysis for Data Scientist | AI | ML | DL

[www.udemy.com/certificate/UC-75b790ac-66fc-4524-9ba6-28a2ecdb845c/](https://www.udemy.com/certificate/UC-75b790ac-66fc-4524-9ba6-28a2ecdb845c/)

2025

## EDUCATION

