

# Dipshikha

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## CAREER OBJECTIVE

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Aspiring Data Scientist with strong foundations in Python, SQL, Machine Learning, and Statistical Analysis. Skilled in transforming raw data into actionable insights through EDA, feature engineering, and predictive modeling. Motivated to contribute to data-driven decision making by building scalable ML solutions, optimizing business processes, and applying analytical thinking to solve real-world challenges.

## EDUCATION

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### Indian Institute of Technology, Madras (IITM)

BS in Programming and Data Science

2023 – 2027

CGPA: 6.09 / 10

### Jawahar Navodaya Vidyalaya, Gaya

Intermediate (CBSE)

2021

Percentage: 91.4%

## EXPERIENCE

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### Robotics & AI Trainer, DRobozone

Oct 2025 – Nov 2025

Trained students in Python, machine learning basics, IoT concepts, and ESP32-based sensor applications. Conducted hands-on robotics sessions, guided teams in building small automation projects, and designed beginner-friendly ML exercises that improved student engagement and conceptual clarity.

## PROJECTS

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### Churn Prediction using Machine Learning

Aug 2025 – Oct 2025

Performed EDA, engineered features, handled imbalance using SMOTE, and trained XGBoost and Random Forest models with hyperparameter tuning. Achieved 90% accuracy and 0.85 F1-score, and identified key churn drivers using SHAP insights to support retention strategies.

### Purchase Value Prediction (Regression Pipeline)

May 2025 – Present

Built an end-to-end regression pipeline including scaling, encoding, and feature engineering. Trained Random Forest and XGBoost models with tuning using ColumnTransformer. Delivered strong R<sup>2</sup> and RMSE performance for predicting customer purchase value.

### Business Data Management Capstone (Retail Domain)

Feb 2025 – May 2025

Analyzed 12 months of SKU-level retail data using Power BI and Excel. Built dashboards revealing demand drops, inventory gaps, and seasonal trends. Recommended pricing and stock optimizations leading to a projected 25% improvement in profit margin.

## SKILLS

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**Programming:** Python, SQL

**Libraries:** Pandas, NumPy, Scikit-learn, Seaborn, Matplotlib, XGBoost

**Tools:** Power BI, Excel, Git, Docker, Azure (Basics)

**Core Competencies:** EDA, Feature Engineering, Predictive Modeling, Data Visualization, Business Analytics

## ACHIEVEMENTS & CERTIFICATIONS

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- Introduction to Machine Learning — Duke University (Coursera)
- AWS Data Analytics — Coursera
- Excel Dashboards for Business Insights — Coursera
- Top 50 Rank — Kaggle ML Competition
- Certified in Cloud Analytics (AWS)
- Strong analytical thinking, communication, and teamwork