

M.Sc. Data Science student with a strong foundation in Python, SQL, and the full data science lifecycle. Experienced in developing predictive models using XGBoost, ensemble learning, and Deep Learning (CNNs) for tasks ranging from customer churn to facial emotion detection. A Kaggle Bronze medalist and British Airways virtual intern, I am looking to leverage my analytical skills and MLOps knowledge in a professional Data Science internship.

SKILLS

Languages	Python, SQL, R
Machine Learning	Scikit-Learn, Supervised Learning, Unsupervised Learning, Data Classification, Model Validation
Deep Learning	TensorFlow, Keras, PyTorch, CNN, RNN, LSTM, GRU
Data Science Lifecycle	Data Analytics, Exploratory Data Analysis (EDA), Data Wrangling, Feature Selection, Feature Engineering
Deployment	Docker, MLOps, Model Deployment

PROJECT EXPERIENCE

Telcom Customer Churn Prediction	10-2025 – 11-2025
• Applied SMOTE and feature scaling to handle class imbalance and uncover key churn indicators like tenure and monthly charges.	
• Conducted a rigorous comparison of 10 classifiers, with XGBoost outperforming the rest.	
• Achieved a competitive 83 accuracy after optimizing hyperparameters using RandomizedSearchCV.	
<i>Kaggle Notebook:</i> https://www.kaggle.com/code/patelparth3399/telcom-customer-churn-prediction-ml	
Real Estate Valuation and Personalized Flat Recommender System	08-2024 – 08-2024
• Developed a real estate valuation system using machine learning to predict property prices based on key features like location, size, and amenities.	
• Built a personalized recommendation engine for flats, leveraging user preferences and data analysis to suggest optimal matches.	
• Implemented features for user interaction and real-time recommendations, demonstrating skills in full-stack data science projects.	
• Utilized Python, Pandas, Scikit-learn, and other libraries for data processing, model training, and evaluation.	
<i>GitHub Repository:</i> https://github.com/partghiht/Real-Estate-Valuation-and-Personalized-Flat-Recommendation-System	
Diabetes Prediction	09-2025 – 09-2025
• Engineered clinical features (Atherogenic Index, BMI/BP risk tiers) and used K-Means clustering to enhance patient profiling and feature representation.	
• Developed a weighted Ensemble Gradient Boosting pipeline (XGBoost, LightGBM, CatBoost) using Stratified K-Fold cross-validation.	
• Achieved a high Out-of-Fold AUC of 0.91, significantly improving binary classification accuracy for diabetes risk.	
<i>Kaggle Notebook:</i> https://www.kaggle.com/code/patelparth3399/diabetes-prediction-challenge-lgbm-catb-xgb	
Emotion Detection using CNN	01-2026 – 01-2026
• Developed a CNN model for facial emotion detection using the FER2013 dataset, classifying expressions like surprise, anger, and happiness.	
• Implemented custom CNN architectures with data augmentation to enhance training data and improve model robustness.	
• Utilized transfer learning with ResNet50 and VGG16 pre-trained models to boost accuracy on image classification tasks.	
• Analyzed dataset structure and performed model training in a Kaggle environment, leveraging Python libraries for data processing and visualization.	
<i>GitHub Repository:</i> https://github.com/partghiht/Emotion-Detection-Model-CNN-	

EDUCATION

Master in Data Science (M.Sc.), Amity University, Noida	10-2025 - 04-2027
Bachelor in Data Science (B.Sc.), Gujarat University, Ahmedabad	08-2023 - 05-2025

ACTIVITIES

British Airways — Data Science Virtual Internship	Fall 2025
CISCO(Gold Badge) — Data Analytics Essential	Fall 2025
Kaggle(Bronze medal) — Telcom customer churn prediction	Spring 2025
Leetcode(Silver Badge) — Top 50 SQL problem solving	Spring 2025
CampusX — Data Science Mentorship Program 2.0	Spring 2025
Data Hackathon (UIDAI) 2026	Spring 2026