

Abhishek Lal

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Data Science professional and B.E. Computer Science graduate with expertise in AI-based solutions using Machine Learning, LLM Competent in full Machine Learning Lifecycle (MLLC). Problem Solver, Data Science and ML Enthusiast.

Key Skills

Programming Languages: SQL (Structured Query Language), Python

Algorithms: Linear and Logistic Regression, Decision Tree, Random Forest, Clustering, Hypothesis Testing, Boosting (XGBoost)

Analytical Tools: Pandas, Matplotlib, Scikit-Learn, Jupyter Notebook, API, NumPy

Supervised Learning: Regression, SVM, Random Forest, Gradient Boosting

Unsupervised Learning: K-Means, Gaussian Mixture Models (GMM), Agglomerative Clustering

Professional Experience

Verse Innovation

WFH

[Data Scientist (Internship) (Internship)]

Jun 2021 - Jul 2021

- Mastered the end-to-end Machine Learning Life Cycle (MLLC) within four weeks, progressing from raw data wrangling to deploying predictive models.
- Successfully implemented ML algorithms (SVM, Random Forests, and K-Means) to identify the most accurate model for 5 specific company datasets.
- Evaluated and visualized model performance for mathematical operations and clustering techniques, delivering a final technical presentation on model optimization from 30% to 75% to the lead data scientist.

Skills: Data Wrangling – Mathematical Operations – Web Scraping – Visualization and decision boundary plotting of the data – EDA (Exploratory Data Analysis) – ML basics – Linear Regression – Logistic Regression – SVM (Support Vector Machines – Decision Tree and Forests – Neural Networks, Clustering (K-Means, Agglomerative and GMM (Gaussian Mixture Model) – Deep Learning Basics

Projects

Credit Card Risk Modeling - FINANCE/ Data Analysis

[Python / Pandas (Data Manipulation) / NumPy (Numerical computing) / Matplotlib/Seaborn (Visualization) / Jupyter Notebook]

Nov 2025 - Jan 2026

- Processed and engineered features on 50K+ credit card transaction records, performing extensive EDA to identify risk patterns, anomalies, and key behavioral indicators.
- Trained and evaluated multiple risk models, including regression and boosting-based algorithms, and applied Optuna for hyperparameter tuning to optimize model performance and stability by 75% -85%
- Deployed the credit risk modeling solution using Streamlit, enabling interactive visualization of risk metrics and model outputs for enhanced business clarity and decision support.

Expense Tracking System - Finance

[Python / Streamlit / Matplotlib / FastAPI / PyCharm]

Jun 2025 - Jul 2025

- Performed data cleaning and preprocessing, extracting expense data directly from MySQL servers into PyCharm for structured analysis.
- Developed an end-to-end expense tracking system with a FastAPI backend and Streamlit frontend, enabling seamless server-based communication between backend and frontend.
- Visualized categorized expense insights using interactive charts and validated backend–frontend API connections through Postman with 90% accuracy.

Hospitality Domain Data Analytics - Finance/Data Analysis

[Data Analysis / MySql / Python]

Jun 2025 - Jul 2025

- Extracted and analyzed data from CSV files, performing comprehensive Exploratory Data Analysis (EDA) to identify trends, patterns, and key business insights.
- Generated data-driven recommendations by interpreting analytical results to suggest improvement areas and strategic focus sectors for the company.
- Developed visual insights using Jupyter Notebook, leveraging Matplotlib for clear graphical representation and effective communication of findings and enhancing the model optimization from 45% to 80%

Education

Birla Institute of Technology, Mesra

Jharkhand, India

Bachelor of Engineering - Computer Science Engineering

Jul 2016 - Aug 2020

6.14 CGPA