MIHIR LAKHANI

+91 8290367088   mihir7845@gmail.com   Linkedin

Aspiring Machine Learning Engineer with hands-on experience designing interpretable, scalable models in domains like fraud detection, healthcare, and network slicing. Proven ability to work with large datasets (70K–6M+), optimize models using SHAP and SMOTE, and present outcomes to industry stakeholders. 3rd Prize winner at Nokia AI Demo for SLA breach prediction.

KEY COMPETENCIES

Languages: Python, C/C++, HTML, CSS
Tools: Jupyter Notebook, VS Code, Git, Flask (basic), PostgreSQL, Notion

PROFESSIONAL EXPERIENCE

AI/ML Research Intern – Network Digital Twin Project
SRM Institute + Nokia Campus Connect   *Jul 2025 - Present*
- Led the full AI/ML pipeline for SLA breach prediction in 6G network slicing (Random Forest + SHAP).
- Built closed-loop feedback using SHAP to auto-trigger control actions.
- Achieved F1 Score: 0.92; demoed at Nokia Campus Connect 2025
- Presented the working prototype live to Nokia technical leaders; recognized with 3rd Prize at Nokia Campus Connect 2025 for excellence in applied AI.

PROJECT EXPERIENCE

Fraud Detection System (Bank Transactions)   *Jun–Jul 2025*
Tools: Python, SHAP, matplotlib, pandas, Jupyter, scikit-learn
- Developed fraud detection pipeline on 6M+ bank transactions using XGBoost & SMOTE.
- Reduced false positives by 23% vs. baseline model after handling multicollinearity & class imbalance.
- Integrated SHAP for explainability and pattern attribution.

Cardiovascular Disease Risk Prediction   *Feb–Mar 2025*
Tools: Python, ID3, scikit-learn, Jupyter, SHAP
- Trained ID3 decision tree on 70K+ patient records for heart risk prediction.
- Achieved 71% accuracy, with high recall emphasis to reduce false negatives.
- Used SHAP to rank feature impact (age, cholesterol, smoking).

ML Portfolio Website – Websume *(In Progress, ETA: Aug 2025)*
- Building a modular web portfolio (React + Flask) for live demos of ML models with SHAP plots, performance metrics, and design trade-off docs.

AutoML Pipeline Design (Early Stage)
- Architecting a framework to automate Machine Learning with model-specific preprocessing, feature selection, and SHAP/LIME explainability.
- Planned to handle both classification and regression problems with built-in options for tuning accuracy, transparency, and performance.

EDUCATION

SRM Institute of Science & Technology — B.Tech in Computer Science (2023–2027)
GPA: 7.09 (Sem 1), 8.95 (Sem 2), 9.00 (Sem 3), 8.87 (Sem 4)
St. Paul's Sr. Sec School (CBSE) — Class XII (2022)
Maharana Mewar Public School (CBSE) — Class X (2020)

CERTIFICATIONS

- 3rd Prize – Nokia Campus Connect 2025 (AI/ML Demo)
- 1st Place – Creative Ingenuity 2023 (AutoCAD Design Competition)
- Python for Everybody – University of Michigan (Coursera)
- Microsoft AI & ML Engineering Track (ongoing)
- Machine Learning with Python – IBM (Coursera) (in progress)

LANGUAGES

- Hindi (Fluent)
- English (Fluent)
- Sindhi (Fluent)
- Tamil (Basic)