

# Pavani Jain

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## Experience

### Data Analyst Intern

July 2024

*Verve Bridge*

*Delhi, India*

- Performed Exploratory Data Analysis (EDA) on 50K+ records to identify trends, correlations, and anomalies in structured datasets.
- Built interactive Tableau dashboards with KPIs and heatmaps, improving stakeholder reporting efficiency by 30%.
- Automated data preprocessing pipelines using Python (Pandas, NumPy), reducing manual analysis effort by 40%.

### Member, Northeastern AI Club

Sep 2025 – Present

*Northeastern University*

*Boston, MA*

- Participated in 6+ AI-focused workshops and hands-on sessions covering machine learning and deep learning concepts.
- Applied learned techniques in small group exercises involving data preprocessing, model training, and result interpretation.

### Participant, NU Hacks

December 2025

*Northeastern University*

*Boston, MA*

- Implemented core features and basic ML logic in a 4–5 member hackathon team using Python, contributing to a functional prototype within a 48-hour timeframe.
- Contributed to feature implementation and model logic using Python and basic machine learning techniques.

## Skills

**Programming Languages:** Python, R, Java, C, HTML, CSS, Bash

**Machine Learning & AI:** Supervised & Unsupervised Learning, Deep Learning, Natural Language Processing (NLP), Neural Networks, Feature Engineering, Model Evaluation, Anomaly Detection, Gen AI

**Data Science:** Exploratory Data Analysis (EDA), Statistical Analysis, Data Visualization, Hypothesis Testing

**Libraries & Frameworks:** PyTorch, TensorFlow, Keras, scikit-learn, Pandas, NumPy, Seaborn, Matplotlib

**Databases & Data Engineering:** SQL, MySQL, Data Cleaning, ETL Pipelines

**Tools & Platforms:** Tableau, AWS (Cloud DevOps), Git, Linux

## Projects

### Credit Card Fraud Detection

Apr 2025 – Aug 2025

*Python, Machine Learning, Deep Learning*

- Developed anomaly detection models using autoencoders, achieving 92% recall in identifying fraudulent transactions.
- Analyzed Logistic Regression, Random Forest, XGBoost, and Neural Network models, with XGBoost achieving 94% ROC-AUC.

### Amazon Product Recommendation System

Sep 2024 – Dec 2024

*Python, Machine Learning*

- Built a collaborative filtering-based recommendation system that improved recommendation accuracy with an 18% reduction in RMSE.
- Assessed model performance using MAE and RMSE metrics to validate recommendation accuracy.

### Netflix Usage Analysis

Jan 2023 – Mar 2023

*Tableau, SQL*

- Examined user behavior and subscription trends using SQL queries and Tableau dashboards to uncover engagement patterns.
- Designed interactive Tableau dashboards with KPIs and heatmaps to support data-driven decision making.

## Certifications

Deep Learning Specialization | Generative AI Certification | Java with Data Structures

## Education

### Northeastern University

Sep 2025 – Present

*Master of Science in Artificial Intelligence*

*Boston, MA*

- Relevant Coursework: Foundations of Artificial Intelligence, Machine Learning, Pattern Recognition, Algorithms