

# Fnu Abhijith

📍 Memphis, United States ✉ abhijith@memphis.edu ☎ 9016085970 🌐 in/fnuabhijith 📄 github.com/FnuAbhijith

## EDUCATION

### Master of Science in Data Science

University of Memphis · Memphis, TN · 2025 · 3.1

### Bachelor of Engineering in Information Science and Engineering

Don Bosco Institute of Technology · Bangalore, India · 2023 · 3.23

## SKILLS

**Programming Languages:** Python (Pandas, NumPy, Scikit-learn, TensorFlow, PyTorch), SQL, R, CSS, HTML

**Data Analysis & Manipulation:** Data Cleaning, Data Wrangling, Exploratory Data Analysis (EDA), Feature Selection

**Data Visualization:** Matplotlib, Seaborn, Plotly, Tableau, Power BI

**Big Data & Cloud Technologies:** Apache Spark, Hadoop, Snowflake, AWS (S3, Lambda, SageMaker)

**Statistics & Mathematics:** Probability, Hypothesis Testing, Linear Algebra, A/B Testing

**Soft Skills:** Problem-Solving, Business Understanding, Data Storytelling, Communication

## EXPERIENCE

### Data Analyst Intern

Brainovision solutions

September 2022 - November 2022, Bangalore, India

- **Analyzed and cleaned** large datasets of over 100 student profiles, improving data reliability by 20% and supporting strategic academic decisions.
- Designed interactive Tableau dashboards to visualize student engagement trends, driving a 15% increase in online program participation.
- **Automated reporting workflows** using Python (Pandas, NumPy) and Excel macros, reducing the time spent on manual reporting tasks by **25%**.
- Partnered with advisors and marketing to implement data-driven enrollment strategies, boosting registrations by 18%.

### Data Science Intern

Teachnook

January 2023 - June 2023, Bangalore, India

- Forecasted student performance with 85% accuracy using predictive models built in Python (Scikit-learn, XGBoost).
- Conducted **exploratory data analysis (EDA)** to identify patterns in student behavior and content strategies.
- Built **automated data pipelines** for collecting and transforming raw data, reducing manual data preparation time by **40%**.
- Delivered insights and visual reports to stakeholders, enhancing student **satisfaction** and **retention**.
- Supported **cross-functional deployment** of data-driven marketing campaigns and academic interventions.

## PROJECT

### Android Malware Detection Using Machine Learning and Deep Learning (Python, Scikit-learn, TensorFlow, PCA, Flask, Jupyter, Git)

University Of Memphis · [github.com/FnuAbhijith/Android-Malware-Detection-Using-Machine-Learning-and-Deep-Learning](https://github.com/FnuAbhijith/Android-Malware-Detection-Using-Machine-Learning-and-Deep-Learning)

- February 2025 - May 2025
- Developed and compared multiple machine learning and deep learning models (Logistic Regression, Random Forest, KNN, MLP, CNN) to detect Android malware using static features extracted from APK files.
- Applied feature selection (RFE) and PCA to reduce dimensionality (216 to ~150 features), improving accuracy and efficiency.
- Achieved **99% accuracy and 1.00 AUC** with MLP + PCA on a benchmark Drebin-format dataset.
- Deployed the best-performing model via a Flask web app for real-time malware prediction using serialized models (`joblib`).
- Handled class imbalance with sampling techniques and evaluated models using precision, recall, F1-score, and ROC-AUC.

### Municipal Debt Risk Prediction using Machine Learning (Python, Scikit-learn, CatBoost, MLP, Random Forest, Pandas, Label Encoding, StandardScaler)

University Of Memphis · [github.com/FnuAbhijith/Municipal-Debt-Risk-Analysis-using-Machine-Learning](https://github.com/FnuAbhijith/Municipal-Debt-Risk-Analysis-using-Machine-Learning)

- September 2024 - December 2024
- Designed a predictive analytics system to forecast bad debts in municipal finance using real billing data from 8 South African municipalities.
- Engineered features and applied data preprocessing (label encoding, scaling, and missing value handling) on 2 years of payment records.
- Trained and evaluated CatBoost, Random Forest, and Multilayer Perceptron (MLP) classifiers to assess financial risk across diverse account types.
- Achieved **100% AUC and minimal misclassifications** using CatBoost, outperforming MLP (0.99 AUC) and Random Forest on debt classification.
- Interpreted results via confusion matrices and ROC curves, identifying financial patterns that signal debt risk, enabling early intervention.