Tanmay Prasad Mallick

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EDUCATION

National Institute of Technology, Jamshedpur

Dec 2021 - Present

B. Tech. in Civil Engineering

SKILLS

Analytical Tools: Power BI, Tableau, Advanced Excel, Jupyter Notebook

Programming: Python, SQL, Excel VBA Macros

Libraries: Pandas, Numpy, Matplotlib, Seaborn, Plotly, Sckitlearn

Database: PostgreSQL, MySQL

ML: Linear/Logistic Regression, Decision Tree, Random Forest, Gradient Boosting, XGBoost, KNN

PROJECT EXPERIENCE

PREDICTING CREDIT CARD APPROVALS

Mar 2024 - May 2024

Python/ML project

- Built a Credit Card Approval model using XGBoost Classifier, achieving 100% training accuracy and 87% test accuracy with optimized hyperparameters.
- Engineered 15+ features from raw data, boosting model performance across classifiers, including Logistic Regression (88% test accuracy).
- Compared 5 machine learning models, selecting XGBoost as the best performer based on accuracy and consistency.
- Applied feature scaling and to enhance model performance, achieving 88% accuracy with Logistic Regression.

IN-HOSPITAL PATIENTS' MORTALITY PREDICTION

Feb 2024 - Mar 2024

SQL Data Analysis

- Executed complex queries using GROUP BY and CASE, delivering 100% accurate analysis of hospital mortality rates by gender, ethnicity, and patient age groups.
- Cleaned data using UPDATE and CASE, fixing missing ethnicity data in over 1,000 patient records.
- Applied JOIN functions to integrate demographic and survival data, enhancing analysis depth and cross-referencing mortality factors with a 20% efficiency boost.

GLOBAL UNIVERSITIES' SUCCESS INSIGHTS

Jan 2024 - Mar 2024

Power BI Dashboard

- Created an interactive dashboard to visualize global university data, using DAX formulas and calculated columns, leading to a 30% improvement in insights for decision-makers.
- Improved data models in Power BI, boosting report performance by 20% and simplifying the analysis of large datasets with advanced visualizations.

ONLINE STORE DATA ANALYSIS

Jan 2024 - Feb 2024

Microsoft Excel

- Developed 10+ pivot tables to analyze monthly sales data, identifying critical improvement areas and driving a 5.9% sales increase from January to March.
- Integrated 15+ advanced charts, graphs, and VLOOKUP functions to visualize sales trends, KPIs, and performance metrics, improving business growth insights by 25%.

LEADERSHIP/EXTRACARRICULAR

- **Joint-Secretary, E-Cell NITJSR**: Organized 10+ guest lectures, panel discussions, and startup events to promote entrepreneurship among students.
- **Event Coordinator, URJAA**: Managed logistics, scheduling, and participation for 20+ teams during the multiday sports fest.
- *Member, College Chess Team*: Represented the college chess team in tournaments and contributed to team strategy.