Manas M Bhat

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EDUCATION

University of Maryland, Robert H. Smith School of Business

Master of Science in Information Systems – STEM Certified (GPA – 3.86/4.0)

College Park, USA

Aug 2022 – Dec 2023

Relevant Coursework: Database Management Systems, Data Analysis in Python, Data Models and Decisions, Big Data and Artificial Intelligence, Data Visualization & Web Analytics, Data Mining and Predictive Analysis, Finance Information Systems

PES Institute of Technology

Bengaluru, India

Bachelor of Technology, Mechanical Engineering (GPA - 3.7/4.0)

Aug 2014 - Jul 2018

TECHNICAL SKILLS

Tools: Jupyter Notebook, R Studio, MySQL, SQL Server Management Studio, Tableau, Power BI, Google Analytics, SAP ERP, AWS, Google Colab, MS Office Suite, Lucid Chart, Github, Postman, Projectlibre, PyCharm, Android Studio

Programming Languages: Python (NumPy, Pandas, BeautifulSoup, SciPy, NLTK, scikit-learn, transformers, seaborn, plotly, matplotlib, Flask), R (dplyr, ggplot, ggplot2), SQL, C, Java

Statistical/ML Techniques: Hypothesis Testing, Linear Regression, Logistic Regression, Confidence Interval, Decision Trees, KNN, Random Forest, Naïve Bayes, K-Means, Neural Networks, Support Vector Machine, Natural Language Processing, Bagging and Boosting

EXPERIENCE

Robert H. Smith School of Business

College Park, MD Jan 2023 – Present

Research Assistant

- Engineered automated web scrapers to build dataset of 5000+ Al use cases from 12 agencies; leveraged **HuggingFace** zero-shot **NLP** to classify with 81% accuracy; compiled comprehensive report with analysis of risks and benefits to shape public sector Al strategy.
- Leveraged in-depth analysis of classified data employing **statistical techniques** and **machine learning** algorithms to derive Al adoption insights, enabling 20% increase in efficiency for decision-making processes through compelling **Tableau visualizations**.
- Fostered innovation by guiding and mentoring 100+ students in **Flask web development**, Python-based **data analysis**, and project management methodologies, facilitating industry project contributions and information system prototype development.

Accenture Bengaluru, India

Application Development Analyst

Nov 2018 - Jul 2022

- Analyzed bank product data with **SQL reporting**, identifying \$3.2M in revenue leakage across 6 underperforming products. Provided data-backed recommendations to discontinue loss-making offerings, resulting in significant cost savings.
- Designed and deployed a **Python GUI** application with Tkinter, evaluating spending patterns of 12 million customers, facilitating personalized product targeting and strategy refinement for a 15% increase in customer satisfaction.
- Spearheaded the development of a dynamic **Tableau dashboard** in collaboration with the Strategy department, leading to a 28% increase in marketing efficiency, achieved by strategically targeting high-performing brands driven by customer shopping trends.
- Orchestrated a team to scrutinize bank products revealing cost inefficiencies that when addressed led to the successful launch of 18 targeted offerings, bolstering stakeholder satisfaction and profitability by 25%.

MauBank Mauritius

IT Applications Intern

Aug 2018 – Sep 2018

- Initiated the bank's ML division, crafting a 92% accurate Random Forest model to predict loan NPA risk, mitigating financial losses.
- Collaborated on an early warning system using Python, substantially lowering NPA rates, fortifying the bank's financial stability.

PROJECTS

Exploratory and Predictive Analysis - Airbnb

- Revamped Airbnb's platform through advanced data analysis, elevating user experience, and winning 3rd place in a competitive **predictive modeling** contest utilizing regression, Random Forest, Neural Networks, and XGBoost, elevating customer experience.
- Performed data cleansing, preprocessing, and exploratory analysis across 100,000 listings & 58 feature variables using R.
- Curated optimal feature set by applying rigorous statistical tests, improving model TPR to 45.68% and 77% accuracy.

Exploratory and Predictive Analysis - Traffic Violations in Maryland

- Analyzed 1.8 million traffic violations to identify high-risk accidents, enabling targeted police interventions to improve road safety.
- Built Random Forest model using violation data to predict accident probability with 97.4% accuracy to flag high-risk vehicles.

Database Management System - STAMP food court

- Architected a **SQL-based database system**, achieving 20% transaction efficiency, and real-time decision-making capabilities, while optimizing employee management processes.
- Streamlined the database with ER modeling and normalization, reducing data retrieval time by 40%, enhancing system performance.
- Generated Tableau dashboards and stories to reduce food court congestion, resulting in a 15% improvement in customer flow and satisfaction.

The Mechanical App

- Pioneered Java-based Android app creation for Engineering students, yielding 10,000+ global downloads and extensive adoption.
- Integrated **Firebase** for data management and boost functionalities, transforming into a dynamic, user-engaging learning platform.