Sowmya Pallempati

Data Analyst/Business Analyst

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EDUCATION

Master of Science in Business Analytics and Project Management, *University of Connecticut* **GPA: 3.93** Aug 2022 — May 2024
Relevant Courses: Predictive Modelling, Data Science using Python, Statistics, Data Management.
Bachelor of Technology in Electronics and Instrumentation, *VNR VJIET* **GPA: 3.9** Aug 2016 — Aug 2020

SKILLS

Programming Languages	Python, R, Java, SQL, HTML, CSS
Tools and Interfaces	Microsoft Excel, Power BI, Tableau, SAS, DBeaver, Oracle, MYSQL, JMP, Git, JIRA, MS-Office.
Analytical Skills	Data Analysis, Data Visualization, Regression modelling, Statistical Modelling, Clustering, Neural networks, Data Mining, Time Series Forecasting, Text Mining, Survival Analysis
Project Management	Microsoft Project,Agile(Scrum, Kanban),Team Management, Project Risk and Cost Management, FMEA.
Libraries	Pandas, NumPy, Matplotlib, Seaborn, pylab, Scikit-learn, TensorFlow, Keras.

TECHNICAL EXPERIENCE

Larsen & Toubro Infotech **Feb 2021 — Aug 2022**
Data Engineer *Pune, India*

- Created dashboards using Tableau for identifying hotspot patterns and defects based on historic data of failed builds and consequences achieving a **20% increase in the defects detected** before production.
- Responsible for handling large-scale data sets, implementing robust **extract, transform, and load (ETL)** data processes resulting in **30%** reduction in data processing time.
- Analyzed data to identify error patterns and designed efficient software rollback procedures, reducing the detection time by **10%**.

Larsen & Toubro Infotech **Nov 2020 — Jan 2021**
Data Analyst Intern *Hyderabad, India*

- Developed a data-driven home-loan application platform by incorporating advanced data analytics techniques using **SAS software** to improve the loan approval process achieving a **30% increase in approval rates**.
- Built an interactive **Power BI Dashboard** to monitor loan approval status, resulting in improved visibility and efficiency, with a **20% reduction in loan approval time**.
- Generated user-specific activity **reports with customizable parameters** by providing enhanced customer experience insights,leading to **10% increase in customer applications**.

DATA ANALYTICS PROJECTS

Insurance policy cancellations predictive analysis **Python, Pandas, SciPy, Sklearn**

- Developed and fine-tuned a Random Forest classification model in predicting policy cancellations to achieve an accuracy of **85%**, leveraging **advanced data analysis** techniques such as data cleaning, EDA, feature selection, and hyperparameter tuning using grid search on a dataset with **700,000 data points and 16 features**.
- Conducted model interpretability using permutation importance to identify the **top 5 features** that have the most significant impact on predicting policy cancellations, resulting in better decision-making and increased operational efficiency.

Heart failure prediction **Excel, JMP**

- Performed **Exploratory Data Analysis** and Pre-processed raw data containing 5110 data points to make it fit for use with different models by drawing correlations and eliminating features with lesser influence.
- Explored and evaluated various models for predicting Heart Failure and obtained a prediction accuracy of **82.5%** over the test data using Decision Tree Models.

Adobe Analytics challenge **Customer Journey Analytics**

- Identified **patterns** in Hilton customer data for classification of trips as business, leisure or bleisure to make personalized recommendations for each trip type resulting in an estimated increase in bookings by **8%**.
- Evaluated trends in booking data and proposed impactful website modifications by analyzing traffic patterns and **identifying gaps**, leading to a **35%** increase in customer satisfaction ratings.

E-Commerce Sales Link **Excel, SQL, Tableau**

- Created interactive Sales Dashboard for a Supermarket Chain using **Tableau's advanced features** empowering stakeholders to visualize and analyze **key performance indicators(KPIs)** leading to data-driven decision-making.
- Provided valuable insights to sales managers through comprehensive **sales breakdown structure** and summaries, resulting in a **15% increase in sales** within the selected time frame.

PUBLICATIONS

Intelligent Traffic Management Using Big Data Analytics and IoT, IJRASET, Volume 9 Issue X Oct 2021,Link
Smart pillow: An intelligent Pillow to track and improve sleep, IJAEMA, Volume XII Issue VIII Aug 2020,Link