Sowmya Pallempati

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WORK EXPERIENCE

Reality Interactive — Hartford, CT
Data Analyst Consultant — Aug 2023 – Dec 2023

- Analyzed **17,580** log files to identify patterns causing **display failures**, leading to a **32%** reduction in **ad disruptions** and averting potential revenue loss.
- Led end-to-end **ETL** and **data preprocessing** tasks with SQL, PostgreSQL, and Python resulting in a **40%** improvement in data quality laying a robust foundation for subsequent analyses.
- Created excel **VLOOKUP**s and performed **segmentation analysis** by market types, enhancing operational efficiency by **15%** through streamlined data analysis.
- Developed **Power BI dashboards** for real-time monitoring, reducing **customer-reported** issues by **28%** through swift detection of playlist **pattern inconsistencies** for the content management team.

UConn Q-center — Hartford, CT
Statistics Teaching Assistant — Jan 2023 – present

- Mentored over **80** students in **statistics** and mathematics, nurturing a solid grasp of core concepts and addressing Queries.
- Facilitated students on academic projects, performing **data analysis** using Minitab, enhancing practical skills in statistical analysis and **data visualization** techniques.

Larsen & Toubro InfoTech — Pune, India
Data Engineer – Client: CITI Bank — Feb 2021 – Aug 2022

- Created **Tableau dashboards** for identifying **defect patterns** based on historical failed build data achieving a **20%** increase in detecting defects before production.
- Conducted routine **data quality** checks on **25**+ tables ensuring **data integrity** and maintained documentation for reference.
- Implemented **ETL** pipelines and developed **triggers, stored procedures**, **functions**, and **views** in **MySQL** reducing manual data handling by **40%**.
- Collaborated closely with **cross-functional** teams to identify **data requirements** and design dashboards. Co-ordinated with **QA team** to ensure successful **sign-offs** and resolve any **SIT/UAT** regression issues within GRC Framework.
- Prepared **Epics** and **user stories** in JIRA, mapping Citibank's application requirements. Communicated **actionable insights** through data visualizations and presentations to clients driving performance improvement strategies.

Graduate Engineer Trainee (Data Analyst Intern) — Nov 2020 – Feb 2021

- Designed **SQL queries** using **joins** and **subqueries** to extract required information from a data file containing **40k** rows.
- Performed **data manipulation** and utilized **analytical functions** for trend identification and **time-based analysis**.
- Formulated performance statistics by creating **15**+ measures using **DAX** expressions and built an interactive **Power BI** dashboard to monitor loan approval status, saving **100s** of hours in analysis.

ACADEMIC PROJECT EXPERIENCE

A case study in optimizing cancer therapy outcomes at Humana | Excel, Python, Power BI. — Nov 2023

- Leveraged advanced **EDA** and methods like **one-hot encoding**, **Lasso regression** and **ANOVA F-Test** in predicting prematurely ending cancer therapies achieving an AUC score of **0.92** with CatBoost Classifier.
- Employed **KNN clustering** and provided segment-specific business **recommendations** saving Humana approx. **$2,450,000**.

Restaurant Analytics | JMP, Power BI — Jun 2023

- Collected **6** months of restaurant data and explored distributions and **correlations** among diverse revenue contributing factors.
- Built Power BI dashboard featuring **key metrics** for daily sales and food wastage. **Redesigned** the restaurant's menu and processes, contributing to an estimated revenue increase of over **10%** and an **18%** reduction in wastage.

Ecommerce-sales | Excel, Tableau | Link**.** — Apr 2023

- Generated **reports** and **dashboards** on **8K**+ orders in **Tableau** for a supermarket chain empowering stakeholders to visualize and analyze **KPIs** related to **sales** and **profit** leading to data-driven decision-making.
- Identified **top 5** performing agents using reports and **key metrics** advising valuable **insights** to the sales manager.

Enhancing customer retention for Hilton Group using analytics | Customer Journey Analytics. — Nov 2022

- Collaborated with a team of **3** to identify **key indicators** of travel, such as travel dates, destinations, and duration.
- Analyzed **traffic patterns** to determine major issues leading to customer exit. Suggested actionable recommendations using findings and analysis, potentially **retaining 12%** customers exiting website.

SKILLS

Languages: SQL, Python (Pandas, NumPy, Matplotlib, Seaborn, Scikit-learn, Keras).
Tools and Interfaces: Microsoft Excel, Power BI, Tableau, Google Analytics, SAS, DBeaver, MYSQL, Hadoop, JMP, Git, JIRA.
Analytical Techniques: Data cleaning and processing, Data modelling, Pattern recognition, Hypothesis Testing, Regression analysis, Clustering, Data Mining, Time Series Forecasting, Data Warehousing, Survival Analysis.

EDUCATION

University of Connecticut — Hartford, CT
Master of Science in Business Analytics and Project Management**, GPA:** 3.95 — Expected May 2024