# **Deepthi Annem**

## **Data Analyst**

Portfolio: https://deepthiannem.github.io/

LinkedIn: <a href="http://www.linkedin.com/in/deepthi-a-249a04318">http://www.linkedin.com/in/deepthi-a-249a04318</a>

GitHub: <a href="https://github.com/deepthiannem">https://github.com/deepthiannem</a>

#### **Professional Summary**

As a motivated Data Analyst with 7 years of experience, I specialize in turning large datasets into useful insights that help improve business performance. I have worked with different types of data for multiple clients, using tools like SQL, Python, Tableau, Power BI, and Looker. My work includes creating dashboards, developing KPI reports, and finding trends to make operations more efficient. I also use cloud platforms like AWS and GCP for data management and analysis.

I am dedicated to continuous improvement and quickly learning new concepts and technologies. I am looking to advance my career in data analytics, and I am eager to learn and adopt new methods. I work well both independently and as part of a team, ready to take on new challenges and contribute significantly. My goal is to use my analytical skills to add value and drive innovation in a forward-thinking organization.

## **Work Experience**

#### Data Analyst, (Southwest Airlines)

Dallas, TX 04/2022 - present

As a Data Analyst at Southwest Airlines, I have transformed raw data into meaningful insights and supported strategic decision-making. My role includes extracting and analyzing data, creating impactful visualizations, and optimizing workflows. By developing advanced data solutions, I have enhanced business performance and customer satisfaction. Notably, I automated reporting processes, reducing manual data processing by 40%.

- Conducted Exploratory Data Analysis (EDA) using AWS data services, Alteryx, and Python to synthesize large data sets, identify market-level trends, diagnose performance issues, and deliver actionable insights.
- Utilized SQL, Python, and advanced Excel for quantitative analysis of historical passenger demand, competitive environment, and consumer buying behavior, leading to a 15% increase in passenger revenue.
- Collaborated with Network Planning and Revenue Engineering teams to define and execute revenue-maximizing strategies, contributing to a \$2 million increase in annual revenue.
- Created innovative data visualizations using Tableau and power BI, enabling evidence-based decision-making and gaining buy-it from Senior Leadership.
- Generated ad-hoc reports and conducted analysis using AWS data services, advanced Excel techniques, and SQL, resulting in a 20% improvement in report turnaround time.
- Developed an automated reporting system using Python and SQL, reducing manual reporting efforts by 50% and saving approximately 200 hours per quarter.
- Applied A/B testing and statistical concepts such as regression analysis and clustering to provide insights for strategic decision- making.
- Utilized BI tools and MS Office Suite to present data-driven insights and reports to stakeholders, enhancing communication and decision-making processes.
- Optimized data warehouse systems to ensure data integrity and accessibility, enhancing overall efficiency in data management and retrieval processes.

#### **Data Analyst,** (Charters Communications)

**St. Louis, MO** 02/2020 - 03/2022

As a Data Analyst at Charter Communications, I played a crucial role in transforming complex data into actionable insights. My role encompassed extracting, analyzing, and interpreting data using Teradata SQL, Microsoft Power BI, and Python. I managed data in Google Big Query, enhancing data accessibility and reliability. By implementing

advanced statistical techniques and predictive models, I significantly improved decision-making accuracy by 10%. Additionally, my efforts in developing an automated data cleansing pipeline and real-time data processing systems contributed to a more efficient and data-driven organizational workflow.

- Extracted, analyzed, and interpreted data using Teradata SQL, improving data accuracy by 15%.
- Developed and maintained over 100 dashboards and reports using Microsoft Power BI, DAX, Power Query, and python visualization libraries such as Seaborn and Matplotlib, increasing reporting efficiency by 20%.
- Utilized advanced statistical techniques and predictive models in R and Python, including linear regression, logistic regression, and time series forecasting, contributing to a 10% improvement in decision-making accuracy.
- Conducted customer segmentation and clustering analysis using K-means and hierarchical clustering to identify key customer groups and tailor marketing strategies, leading to a 12% increase in targeted campaign success.
- Performed exploratory data analysis (EDA) to assess the quality of datasets, identifying outliners and missing values and developed an automated data cleansing pipeline using Python that outputs clean data to Google BigQuery.
- Designed and implemented streaming data pipelines with Dataflow and Pub/Sub to handle real-time data processing, ensuring timely and accurate data flow across the organization.
- Built and evaluated regression models using machine learning libraries like scikit-learn to predict customer behavior and sales trends, enhancing strategic decision-making capabilities.
- Spearheaded the development of a machine learning model to predict customer churn using logistic regression and decision trees improving retention rates by 8% and providing valuable insights for the marketing team.

#### Data Analyst, (O'Reilly Auto Parts)

**Spring Field, MO** 01/2019 - 01/2020

As a Data Analyst at O'Reilly Auto Parts, I utilized GCP services, Python, and SQL for advanced data analysis and predictive modeling. By optimizing data workflows and employing predictive analytics, I improved sales forecasting and inventory management accuracy, achieving a 20% reduction in stockouts and overstock situations. Additionally, I used DAX for data modeling in Power BI, performed web scraping for competitive analysis, and applied data wrangling techniques to enhance overall data quality and reporting.

- Analyzed sales data using SQL and Python on GCP services like Google Cloud Storage (GCS) and Big Query, identifying trends to drive strategic initiatives.
- Created and maintained Power BI dashboards to visualize key performance indicators (KPIs), improving report generation and monitoring efficiency.
- Prepared detailed reports in Excel using VLOOKUPs and Pivot Tables, forecasting trends and helping secure a \$50K budget increase.
- Conducted A/B testing on sales campaigns with Python, optimizing performance and achieving a 15% increase in conversion rates, and enhanced targeting strategies using machine learning algorithms for predictive analysis.
- Automated data processing with python and AQL, reducing manual effort, and provided ad-hoc analysis support across department delivering actionable insights.
- Utilized DAX and Power Query in Power BI to transform and model data for more accurate and dynamic reporting.
- Conducted market basket analysis using Python to identify product affinity, leading to strategic placement of complementary products and a 10% increase in average transaction value.
- Designed and executed complex SQL queries, including stored procedures, JOINS, and UNIONS, to extract and analyze large datasets, providing critical insights that led to the optimization of pricing strategies and a 7% increase in overall sales revenue.
- Identified outliers and anomalies in sales data using Interquartile Range (IQR) and Z-score methods, enabling more accurate trend analysis and contributing to a 15% improvement in demand forecasting accuracy.

**Data Analyst,** (Ahex Technologies Private Limited)

**Hyderabad, India** *06/2017 - 12/2018* 

financial data to optimize budgeting and forecasting processes. My role involved detecting and resolving data anomalies, performing normalization, and designing ER relationships in Tableau to enhance data visualization. By leveraging these skills, I played a crucial part in reducing data discrepancies by 20%, which directly improved the accuracy and reliability of our financial reports. This enabled more informed strategic decisions and streamlined our financial operations.

- Collected, cleaned, and analyzed financial data for budgeting and forecasting using regression analysis and time series analysis, improving forecast accuracy by 15%.
- Developed and maintained Tableau dashboards to track key financial metrics and advanced calculations, parameters, and custom SQL queries, reducing report generation time by 5 hours per week.
- Automated data extraction, cleaning, and reporting using Python (Pandas, Matplotlib, Seaborn), SQL, and VBA, saving over 100 hours annually through macros and stored procedures.
- Conducted statistical analysis and modeling using joins, CTEs, pivot tables, and advanced formulas in Excel and Google Sheets to support decision-making, leading to the identification of 3 key business insights.
- Prepared and delivered presentations and reports to stakeholders, effectively communicating insights and recommendations, contributing to a 10% increase in departmental efficiency.
- Utilized Snowflake database for efficient data warehousing and SQL queries, enhancing data retrieval and analysis processes.
- Performed exploratory data analysis (EDA) using histograms, scatter plots, pair plots, box plots, and kernel density estimation (KDE) plots to identify trends and patterns, aiding in comprehensive data understanding.

## **Education**

Master's in computer science Saint Louis University

St. Louis, MO

#### **CGPA: 3.86/4**

Relevant Courses: Machine Learning, Databases, Natural Language Processing, Software Development, Algorithms, Artificial Intelligence, Python, Java, Data Structures, IOT.

## **Skills**

- Data Visualization: Tableau, Power BI, Looker, Excel, Google Charts, Alteryx, Olik View
- Database: MySQL, Oracle SQL, MSSQL, Google Big Query, AWS Databases, DB2, Snowflake
- **Programming Language:** Python, R, SQL, C++
- Cloud Platforms: GCP, AWS
- Statistical Analysis: Regressions, A/B Testing, Clustering, Tine-series Analysis, Bayesian Statistics, Survival Analysis, Correlations
- Version Control: Git, GitHub
- Project Management and Collaboration: Agile, SDLC, JIRA, ServiceNow, MS Office Tools, Google Workspace
- Machine Learning Algorithms: Decision Trees, Random Forests, Linear Regression, KNN algorithm, Naive Bayes, Logistic Regression, Support-Vector Machine, Feature selection
- Advanced Python Libraries: Pandas, NumPy, Matplotlib, Seaborn, SciPy
- **Soft Skills:** Presentation, Planning, Organized, Creative Problem-Solving, Teamwork, Active Listening, Adaptability, Analytical Thinking