SANCHI GUPTA

SUMMARY

Data Analyst with 2+ years of experience turning complex datasets into actionable insights using Power BI, Tableau, SQL, and Python. Skilled in KPI development, data modeling, and interactive dashboarding to support strategic decision-making

WORK EXPERIENCE

Data Analyst Intern | Allagash Brewing Company

01/2025 - 03/2025

Boston, MA

- Developed a real-time truck recommender using weather and temperature data to reduce spoilage
- Applied DBSCAN clustering to identify high-demand zones, improving delivery prioritization and routing strategy
- Built a Power BI dashboard to track shipping trends, costs, and performance
- Collaborated with operations teams to deliver insights to support logistics decisions and improve stakeholder planning

Data Analyst | Falcon Cables

07/2022 - 08/2023

Delhi, India

- Analyzed sales data to identify trends and customer preferences, increasing marketing efficiency by 7%
- Optimized inventory management with data-driven insights and interactive Power BI dashboards
- Partnered with business teams to translate KPIs into visualizations and develop dashboards aligned with strategic goals

HR Analyst | BimSrv LLP

07/2021 - 06/2022

Delhi, India

- Analyzed HR data including attendance, turnover, and recruitment metrics to drive strategic decisions
- Built interactive Excel dashboards using advanced formulas and pivot tables for real-time HR insights
- Created KPI dashboards to track hiring efficiency, compensation, time-to-fill, and departmental performance metrics

PROJECTS

AI-Powered Text-to-SQL Chatbot for University Database Querying

Tools used: OpenAI API, LangChain, OpenShift, Docker

- Improved response accuracy by 20% in an NLP chatbot using OpenAI, LangChain, and SQL generation
- Applied text mining and SQL generation on unstructured chatbot queries
- Deployed resources on OpenShift and configured APIs with FastAPI for robust backend integration

Chicago Traffic Crash Analysis

Tools used: Azure Blob Storage, Databricks (PySpark), Snowflake, SQL, Tableau

- Built an ETL pipeline to ingest, clean, and merge 2M+ records using PySpark, with data sourced from Azure Blob Storage
- Conducted EDA to uncover trends in crash severity, time of day, lighting conditions, and driver behavior using Spark SQL
- Enforced schema and data quality standards before loading into Snowflake to support reliable, well-managed data solutions
- Designed interactive Tableau dashboards to analyze crash trends, enhancing city traffic reporting and safety insights

Emergency Care Analytics Dashboard (Healthcare)

Tools used: Power BI, DAX, Power Query, Google BigQuery

- Connected Power BI to Google BigQuery and built an ETL pipeline using Power Query for scalable data access
- Developed DAX measures to calculate patient wait times, admission ratios, and departmental performance metrics
- Designed an interactive dashboard to visualize patient flow, wait time trends, and referral patterns across departments

A/B Testing on Simulated Clickstream Data for CTR Comparison

Tools used: Python (Pandas, NumPy, SciPy, Matplotlib, Seaborn)

- Simulated 200K+ user sessions with real-world data issues (nulls, outliers, duplicates)
- Cleaned and analyzed click behavior to compare CTRs between control and experimental groups using a one-tailed Z-test
- Published dataset to Kaggle for reproducibility and public exploration

EDUCATION

Northeastern University, Boston, MA

09/2023 - 03/2025

Master of Analytics (STEM-Designated); GPA: 3.97/ 4.00

Guru Gobind Singh Indraprastha University, Delhi, India

08/2017 - 05/2020

Bachelor of Business Administration; CGPA: 3.23/4.00

TECHNICAL SKILLS

SQL, Python, R, A/B Testing, Hypothesis Testing, LangChain, Tableau, Power BI, Excel (Advanced: Formulas, Pivot Tables, VLOOKUP, Data Cleaning), PySpark, Databricks, Snowflake, Google BigQuery, AWS, Git, Azure

CERTIFICATIONS

Microsoft Certified: Power BI Data Analyst Associate (PL-300), Microsoft, 2025