

Summary

Strategic Data Analyst with 4+ years of transformative experience in leveraging advanced analytical methodologies to drive critical business decisions. Proven expert in converting complex datasets into compelling business insights using cutting-edge data science techniques, including machine learning algorithms and predictive modeling. Consistently delivers data-driven solutions that optimize organizational performance, enhance operational efficiency, and uncover innovative growth opportunities across financial services and technology sectors.

Skills

- **Programming Languages:** Python, R, SQL, DAX, VBA, Julia
- **Data Analysis Frameworks:** Pandas, NumPy, SciPy, Scikit-learn, TensorFlow, Keras
- **Statistical Analysis:** Advanced Hypothesis Testing, Regression Analysis, Time Series Analysis, Bayesian Inference
- **Machine Learning:** Predictive Modeling, Clustering, Classification, Ensemble Methods, Deep Learning
- **Data Visualization:** Tableau, Power BI, matplotlib, Seaborn, Plotly, D3.js, Looker Studio
- **Big Data Technologies:** Apache Spark, Hadoop, Hive, Apache Airflow, Databricks
- **Cloud Platforms:** AWS (Redshift, QuickSight), Google BigQuery, Azure Synapse Analytics, Snowflake
- **Database Management:** MySQL, PostgreSQL, MongoDB, Microsoft SQL Server, Oracle, Cassandra
- **Business Intelligence:** Power BI Premium, Tableau Desktop, Qlik Sense, SAS
- **ETL & Data Pipeline Tools:** Apache Airflow, Informatica, Microsoft SSIS, Talend
- **Advanced Excel:** Power Pivot, Power Query, VBA Macros, Advanced Formulas
- **Reporting & Analytics:** Google Analytics, Adobe Analytics, Alteryx, RapidMiner
- **Version Control & Collaboration:** Git, GitHub, Jupyter Notebooks
- **Statistical Software:** SPSS, SAS, STATA, R Studio

Experience

Data Analyst | BNY Mellon - USA

SEP 2023 – PRESENT

- Architected advanced predictive analytics infrastructure using Python, TensorFlow, and scikit-learn, developing sophisticated machine learning models that enhanced financial forecasting accuracy by 40% and provided unprecedented insights into market trends and risk assessment
- Engineered comprehensive data warehousing solution utilizing AWS Redshift, Apache Airflow, and Databricks, implementing complex ETL processes that consolidated 15+ disparate data sources, reducing data integration time by 60% and improving overall data accessibility
- Conducted deep-dive statistical analyses on complex financial datasets using advanced econometric techniques, identifying critical business insights that directly contributed to \$3.2M in potential cost optimizations and strategic resource allocation
- Developed interactive, enterprise-grade Tableau and Power BI dashboards with advanced calculated fields and complex DAX measures, creating dynamic visualization solutions that transformed intricate financial data into clear, actionable insights for C-level executives
- Implemented cutting-edge data cleaning and preprocessing techniques using Pandas, NumPy, and advanced statistical methods, establishing robust data quality frameworks that reduced reporting inconsistencies by 45% and enhanced overall data reliability
- Designed and deployed automated reporting systems using Python scripting and SQL stored procedures, dramatically reducing manual reporting efforts by 70% and significantly improving operational efficiency and data processing speed
- Performed sophisticated financial risk analysis using advanced statistical modeling, Monte Carlo simulations, and machine learning algorithms, providing critical predictive insights for strategic business planning and risk mitigation
- Collaborated across cross-functional teams to integrate machine learning models into existing business intelligence platforms, developing advanced predictive capabilities that enhanced decision-making processes and strategic foresight
- Conducted comprehensive A/B testing and experimental design analyses, leveraging statistical techniques to validate business hypotheses and optimize key performance indicators across multiple business units
- Developed custom Python libraries and data analysis toolkits to standardize advanced analytical processes, improving team productivity and ensuring consistent, high-quality analytical methodologies

Data Analyst | DataOne - INDIA

JAN 2020 – JUL 2022

- Pioneered business intelligence solutions using Power BI, Tableau, and advanced data visualization techniques, creating 25+ interactive, multi-dimensional dashboards that provided real-time, comprehensive insights across diverse business units
- Executed sophisticated market research and competitive analysis utilizing advanced statistical methodologies, machine learning clustering techniques, and predictive modeling to identify emerging market opportunities and optimize product strategies
- Developed complex, optimized SQL queries and advanced data pipelines using Apache Spark and Airflow, implementing robust ETL processes that improved data extraction, transformation, and loading efficiency by 50%
- Constructed advanced predictive models using scikit-learn, TensorFlow, and ensemble machine learning techniques, enhancing customer segmentation accuracy by 35% and developing highly precise predictive algorithms
- Implemented comprehensive A/B testing frameworks and statistical hypothesis testing methodologies, providing data-driven validation for critical business strategies and marketing initiatives
- Created advanced Excel reporting solutions with sophisticated VBA scripting and Power Query transformations, automating complex data analysis tasks and reducing reporting preparation time by 65%
- Leveraged Google Analytics, Adobe Analytics, and advanced web analytics tools to derive deep insights on user behavior, optimizing digital marketing strategies and improving conversion rates by 25%
- Developed and implemented robust data governance frameworks, ensuring data quality, consistency, and compliance with stringent organizational and regulatory standards
- Designed and maintained complex data models and relational databases, utilizing advanced normalization techniques and performance optimization strategies
- Conducted advanced statistical analyses using R and Python, applying complex statistical methods to extract meaningful insights from large-scale, multidimensional datasets

Education

Master of Science in Information Systems | Central Michigan University, USA

Bachelor of Technology in Electronics Communication Engineering | SRM Institute of Science and Technology, Kattanklathur, INDIA