Shrinidhi Sudhir

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• **LinkedIn** •**Portfolio**

Education

Master's in Business Analytics	**Aug 2022 – May 2024**
University of Houston, Houston	*GPA: **3.98***

- *Relevant Coursework: Advanced Database Management Tools, Cloud Data Visualization, Advanced Programming in Big Data Analytics, Cloud and Collaboration Solutions, Research Design and Problem Solving*
- *Project Manager - Graduate Indian Student Organization*
- *Dean's Award (Top Outgoing Student)*

Bachelor's, Electrical Engineering	**Aug 2017 – Apr 2021**

Anna University, Coimbatore, India

Certifications: *IBM Data Science Specialization, Career Essentials in GitHub Professional Certificate, Atlassian Agile Project Management Professional Certificate, AXELOS PRINCE2® Foundation Certification*

Skills

- **Programming Languages:** SQL, Python, R, VBA
- **Visualization Tools:** Tableau, Power BI, Excel
- **Modeling:** Machine Learning, Deep Learning, Time Series
- **Databases:** SQL, PostgreSQL, Snowflake, Oracle, MySQL
- **Business Tools:** Microsoft, Excel/Numbers/Sheets, Word/Pages/Docs, PowerApps, Agile, JIRA, Trello

Experience

Hobby School Of Public Affairs, Houston, Texas   **Feb 2024 - Current**
Research Analyst

- Conducted a market research analysis leveraging Python and SQL to identify trends, enhancing data-driven insights for targeted investment strategies by 25%.
- Analysed techno-economic, environmental, health, and social impacts using various Machine Learning models.
- Conducted Social Life Cycle Analysis, projecting a 20% emissions reduction from carbon capture(CCUS) facilities
- Created interactive Tableau dashboards to visualize performance, reducing decision-making time by 30%.
- Extracted, cleaned, and transformed data from structured and unstructured sources (CSV, JSON, Parquet), improving data consistency by 25%.

University of Houston, Houston, Texas   **Oct 2022 – Feb 2024**
Instructional Analyst

- Led discussions on the impact of globalization on business operations, facilitating understanding of global market.
- Analysed the global business environment, ensuring students applied theoretical concepts to real-world scenarios.
- Mentored 300+ students in mastering analytical techniques to evaluate the factors influencing business strategies
- Assessed public health risks and economic outcomes through analysis driving a 12% improvement in community health

HMH – Baker Hughes, Houston, Texas   **May 2023 – Aug 2023**
Data Intern - Product & Innovations

- Built BI dashboards to visualize sales, competitor performance, and regional trends, empowering leaders to make data-driven decisions.
- Spearheaded key feature mapping project, resulting in a comprehensive software description and development tool for the Overhaul and Repair sector which increased the overall sales by 60%.
- Developed a Real-Time Analysis Power BI dashboard, utilizing Python scripts to extract and refine JSON data from Azure Blob storage, enriching the Digital Inspection Tool with data-driven insights.
- Designed dashboard for optimizing work allocation and resource efficiency for Field Service Engineers enhancing utilization by 43%.
- Developed time-series forecasting models to predict inventory demand, optimizing supply chain operations and reducing stockouts by 15%.
- Automated operational reporting with Tableau-calculated fields, cutting delays by 50% and providing real-time metrics to the support team.

Vauld, India   **Apr 2021 – Aug 2022**
Market Research - Workforce Analyst

- Built predictive models like Random Forest and Logistic Regression, achieving 85% accuracy in churn analysis and driving retention strategies that improved customer retention by 20%.
- Enhanced call center efficiency by analyzing response times, reducing wait times by 30% during peak hours.
- Developed machine learning models for sales price forecasting, improving inventory planning accuracy by 95% and reducing stockouts.
- Partnered with expansion teams to establish KPI-driven benchmarks, facilitating the successful reorganization.
- Conducted employee performance evaluations using statistical models, ensuring fair bonus distribution and improving satisfaction rates by 10%.
- Utilized Excel Power Pivots and advanced functions to refine retention strategies, leading to a 15% increase in repeat customer rates.

ACADEMIC PROJECTS & OUTSIDE EXPERIENCE

Large Language Model (LLM) for Clinical Text Generation & Summarization
- Fine-tuned transformer models (GPT-2) using PubMedQA and MIMIC-III datasets for clinical summarization and QA tasks.
- Evaluated performance using ROUGE, BLEU, and Perplexity metrics to optimize output relevance and coherence.
- Applied domain adaptation techniques and preprocessing to enhance model accuracy for healthcare applications.

Bakken Shale Analytics – Rystad Energy Case Study
- Scraped and analyzed 16,000+ well records to assess operator activity, formation trends, and production efficiency.
- Developed Power BI dashboards to visualize cycle time, post-peak output, and well performance across counties.
- Recommended drilling optimizations and strategic investments based on geo-performance patterns and operational metrics.

CenterPoint Energy Financial & Socio-Economic Analysis
- Conducted financial and socio-economic analysis of CenterPoint Energy, leveraging Power BI dashboards with advanced visualizations.
- Analysed revenue trends, capital expenditures, and tax distributions (2019-2022) to provide actionable insights for risk mitigation.
- Benchmarked CenterPoint Energy against competitors using key financial metrics to evaluate profitability and operational efficiency.

Prediction Enhancement of Central-Line Bloodstream Infections (CLASBI) for Texas Children's Hospital
- Developed ML models to forecast CLABSI in pediatric intensive care patients using Python, enhancing accuracy and relevance.
- Reduced dataset features by 40%, optimizing model performance and computational efficiency for operations.
- Integrated models into decision-making processes, minimizing Type 2 errors to improve patient outcomes.

EV Market Analysis for Washington State
- Conducted analysis of Washington State's hybrid EVs, leveraging data from the Department of Licensing.
- Orchestrated data integration and visualization, utilizing SQL in PostgreSQL and Tableau.
- Used visualization to examine demographic correlations between income per capita and EV adoption rates.

Business Opportunities in various sectors and venue analysis using Machine Learning
- Developed K-means classification model to assist Toronto newcomers, identifying top industries based on historical data.
- Analysed four-square data, identifying 239 venue categories and top 10 categories per borough.
- Visualized 5 clusters depicting popular venues and boroughs, facilitating exploration and engagement recommendations.