SAI RAGHAVENDRA VIRAVALLI

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EDUCATION

Northeastern University, Boston, MA *Sep 2021-May 2023*
Master's of Science in Information Systems
Relevant Coursework: Data Science, Parallel Machine Learning, Big Data Systems, Machine learning in Finance

Vellore Institute of Technology, Vellore, India *Jul 2016- Jun 2020*
Bachelor of Technology in Computer Science Engineering
Relevant Coursework: Data mining, Natural language processing, Statistics, Data Structures and Algorithms, Database Management Systems

TECHNICAL SKILLS

Programming Languages:	Python (NumPy, Pandas, Flask), Java, SQL, Shell, R, C++, JavaScript
Data Science Technologies:	Sklearn, Keras, Pytorch, TensorFlow, scikit-learn, CNN, Neural Networks, NLP, LLM
Databases:	PostgreSQL, MySQL, Big Query, MongoDB
Data Visualization:	Data studio, Tableau, Microsoft Power BI, Alteryx, SAS, Seaborn, Plotly
Tools:	Microsoft Excel (VLOOKUP, Macros, Pivot table), JIRA, API integration
Cloud & Devops tools:	Google Cloud Platform (GCP), Azure, Docker, Git, Airflow, Spark, Beam, AWS, Kubernetes

EXPERIENCE

Jersey Stem, Remote, US *Aug 2023 – Aug 2024*
Data Analyst
- Lead data extraction initiatives for non-profit tech companies utilizing **GCP** and **Big Query**, achieving 20% process & data optimization
- Developed and implemented data-driven strategies, resulting in affecting **KPIs** such as a 30% increase in program effectiveness, 25% growth in donor acquisition, and a 15% increase in long-term donor engagement through targeted campaigns
- Played a pivotal role in **Salesforce** integration, securing a noteworthy boost of $150,000 in funds through enhanced tracking and **streamlined** automated communication processes
- Prepared **Tableau** reports and presentations to communicate data insights to stakeholders and board members during weekly meetings

Northeastern University – College of Engineering, Boston, MA *May 2022 – Mar 2023*
Data Scientist
- Spearheaded a collaborative research project with a cross-functional team of marketers, data scientists, and researchers to enhance marketing campaign effectiveness based on applicant data for the university
- Utilized **Python**, **R**, and **Tableau** for data analytics leveraging **statistical** packages, achieving a 79% ROI from -45% from targeted marketing efforts and 3.5X response rate after implementing models

Deloitte Touche Tohmatsu Ltd, Bengaluru, India *Mar 2021 – Aug 2021*
Executive Analyst
- Integrated **ML** models for a leading private bank's net banking, boosting fraud detection by 25% and saving over $300,000
- Orchestrated the design and implementation of **ETL** pipelines using **AWS** services, automating data extraction from 7 diverse sources, processing 100GB of data daily, and reducing data synchronization time by 40%
- Performed **Ad hoc SQL** querying to provide relevant insights for the business insights team, enhancing data-driven decision-making
- Facilitated **Agile** ceremonies (sprint planning, reviews, retrospectives) on **JIRA** as a **Scrum** Master with cross functional teams across multiple pods, achieving 96% milestone completion and ensuring rapid, predictable delivery

Akriti Consulting, Chennai, India *Jun 2018– Mar 2021*
Data Science Consultant
- Developed and executed data migration strategies with **AWS**, reducing processing time by 25% and increasing efficiency by 30%, leading to $200,000 in cost savings and optimized a financial client's data infrastructure
- Improved forecasting accuracy by 10% through **Python**-based **time series** analysis based on the financial data and created interactive dashboards, providing clients with actionable insights for data-driven decisions
- Enhanced data quality using **SQL** and **Power Query** to correct 3% of erroneous data, reducing inconsistencies by 95% and ensuring reliable, accurate data
- Automated reporting and performance tracking with **Python**, cutting decision-making errors by 80% and delivering **real-time insights** to boost operational efficiency and strategic planning

ACADEMIC PROJECTS

Twitter marketing campaign analysis *Sep 2022 – Dec 2022*
- Designed an **ETL** pipeline for Twitter API data analysis based on keywords, utilizing **Airflow** and Apache **Beam** for data transformation and storage in **BigQuery**
- Implemented sentiment analysis with Hugging Face models on **AWS** Lambda and deployed in **FastAPI** framework on **GCP** App Engine, with **JWT** authentication
- Locations from the named entities were used to display relevant news using an open-source News API along with real-time metrics on a **Tableau** dashboard embedded in the WebApp

Restaurant Management System *Jan 2022 – May 2022*
- Created relational database design for hospitality industry & executed it leveraging **SQL** Server & **data** modeling tools
- Developed database tables, views, stored procedures, common table expressions, procedures, database triggers
- Optimized business metrics through database design and using **python** functions for various functions
- Used **Tableau** to build a live dashboard providing metrics, data analysis and data insights

Political lean between news sources Analysis *Sep 2021 – Dec 2021*
- **Scraped** web data of 80,000 comments from Reddit using **R** and 100,000 tweets of news sources to analyze the political leanings of the data
- Utilized sentiment analysis, bi-grams, and word associations to demonstrate bias in various sources, effectively visualizing findings
- Used Random Forest, XGBoost, and Regression; XGBoost achieved 85% accuracy classifying articles by political bias