Rindhuja Treesa Johnson

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SKILLS

- Tools: SQL, Python, C++, MS Power BI, Tableau, MS Excel, Streamlit
- Cloud & Big Data: Google Cloud Platform, Snowflake, AWS, Azure, Databricks, Spark, Hadoop
- Database Management: MySQL, MS SQL Server, Azure Data Studio, PostgreSQL
- IDE & Project Management: Docker, Jupyter NB, Visual Studio Code, GitHub, Jenkins, Google Colab, SharePoint
- Python APIs/Lib: Pandas, NumPy, Matplotlib, Seaborn, StatsModels, Sci-Kit Learn, PySpark, TensorFlow, XGBoost, PyTorch, NLTK, Keras, LangChain, Transformers, HuggingFace, Flask

EXPERIENCE

Data Scientist, Smart Ecosystems Inc. (Outlier)

Jan 2024 - Present

- Developed **ETL pipelines** in Python and SQL to clean and transform **large** datasets.
- Conducted **regression analysis** and **Bayesian inference** to analyze customer trends and KPIs for strategic planning.
- Deployed **ML models** with TensorFlow and Sci-Kit Learn to improve operational efficiency.
- Designed **Tableau dashboards** visualizing KPIs, leading to data-driven decisions by stakeholders.
- Enhanced **AI model accuracy** by 25% through feature engineering and pattern analysis.
- Achieved 95% model accuracy via advanced **QA frameworks** and validation protocols.
- Automated **content validation workflows**, ensuring high-quality, human-like AI responses.
- Improved AI-generated content accuracy by 30% using **Supervised Fine-Tuning** (SFT) and **RLHF** techniques.
- Built **recommendation systems** using TensorFlow and PyTorch, increasing conversions by 18%.
- Collaborated with cross-functional teams to align data strategies with business objectives.

Junior Data Scientist, Leveragai Inc.

Dec 2023 - Present

- Built **HIPAA-compliant Power BI** dashboards for patient recovery and treatment metrics.
- Reduced ER wait times by 25% using **predictive models** in Python and SQL.
- Analyzed CMS datasets (Payroll-Based Journal) in SQL, delivering actionable staffing insights for administrators.
- Deployed **LLM models** based on **RAG** with AWS SageMaker, improving clinical documentation by 35%.
- Led the development of an **AI Tutor for a Generative AI** using Azure OpenAI and tested for **quality assurance**.
- Designed and implemented a **Retrieval-Augmented Generation** (**RAG**) pipeline for real-time query resolution.
- Fine-tuned **LLM models** to generate LaTeX-formatted responses for math and technical content.
- Optimized **prompt engineering** strategies to improve AI accuracy and user engagement by 30%.
- Analyzed user interactions to refine model outputs, boosting content relevance and precision.

Data Analyst, Redwood Algorithms

Jan 2021 - Dec 2022

- Increased **customer engagement** by 180% through predictive analytics and A/B testing.
- Automated social media performance metrics reporting with SQL and BigQuery.
- Designed **Power BI dashboards** for real-time user engagement and sentiment analysis.
- Conducted **CTR analysis**, boosting ad campaign ROI by 25% on digital platforms.
- Analyzed **customer behavior trends** with Python, deriving insights for marketing efficiency.
- Implemented SQL-based **data pipelines** for seamless integration of social media metrics.
- Presented insights to stakeholders, **driving strategic decisions** and improving communication.
- Optimized **ad targeting strategies**, enhancing customer reach and conversion rates.

TEACHING EXPERIENCE

Graduate Teaching Assistant, UMBC

Jan 2024 – May 2024

- Tutored 50+ students in Apache Spark, Hadoop, Databricks, and AWS for big data analytics.
- Graded and provided feedback on data-intensive assignments, improving project quality by 20%.
- Guided students on scalable data engineering workflows and Spark MLlib implementations.
- Recommended AI-driven study aids, integrating LLM-generated explanations into class support.
- Enhanced learning outcomes through real-time debugging of Python and PySpark assignments.
- Maintained transparent communication between professors and students, reporting data integrity issues.

RTTP Math Coach, UMBC Sherman Scholars' Program

Oct 2023 - May 2024

- Improved arithmetic proficiency of K-12 students by 70% using adaptive learning strategies.
- Implemented AI-enhanced practice tools, leveraging prompt engineering for custom problem generation.
- Collaborated with AI models to generate LaTeX-formatted content for advanced math exercises.
- Designed personalized learning frameworks informed by performance analytics and student data.
- Increased engagement by 50% through data-informed session planning and interactive activities.

PROJECTS

CLV Prediction for Insurance Companies with Python, PowerBI, AWS, SQL, Streamlit, Gemini, and LangChain Steam Review Analysis on Big Data using Apache Spark and Hadoop in Python

<u>Time-series Analysis and Forecasting of Forex Rates with SARIMAX models</u>

<u>Nutrition Dashboard for US-based food produces in Tableau</u>

<u>Stock Portfolio Optimization and Dashboard Using Microsoft Excel, SQL, and Python</u>

EDUCATION

University of Maryland - Baltimore County (UMBC)

Baltimore, MD

Master of Professional Studies in Data Science

GPA: 4.0/4.0

Pondicherry University

Puducherry, India

Master of Science in Physics GPA: 3.61/4.0 Valedictorian

HOBBIES

■ Blogging: <u>Medium</u>

■ Badminton

■ Freelance Prompt Engineering – RLHF and SFT