RINDHUJA TREESA JOHNSON

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SKILLS

Languages	SQL, Python3, R, C++, HTML, DAX, LaTeX
Python Libraries	Pandas, NumPy, Matplotlib, Seaborn, TensorFlow, PyTorch, Keras, Sci-Kit Learn, PySpark
R Libraries	Tidyverse, TidyR, Ggplot2, Plotly, Sf, Dplyr, SpData
Expertise	Machine Learning, Big Data Handling, Data Analysis, Data Visualization, AI, LLM, GitHub, Descriptive Statistics, Financial Analysis, Trend Analysis, Business Intelligence Database Management, Deep Learning, Hypothesis Testing, Regression Modeling, Research
Platforms	MS Power BI, Tableau, MS Excel, Oracle MySQL, Apache Spark, RStudio, MS SSMS, Apache Hadoop, AWS, Databricks, GitHub, VS Code

EDUCATION

University of Maryland Baltimore County — Baltimore, MD
Master's in Data Science — May 2024
CGPA: 4.0/4.0
Data Analysis & Machine Learning with R, MS Excel & Python, Data Visualization with Power BI, Big Data with HDFS & Apache Spark, and Financial Data Science

Pondicherry University — Puducherry, India
M.Sc.(5-year Integrated) in Physics — May 2022
Mathematics, Statistics, Electronics, Python, Fortran

EXPERIENCE

University of Maryland Baltimore County — Baltimore, MD
Graduate Assistant (Course - Platforms for Big Data Processing) — Jan 2024 - May 2024

- Accelerated the evaluation of student works by 200% as per the grading criteria and offered constructive feedback
- Contributed to the streamlining of course materials, with the instructors saving an average of 10 hours per week
- Enhanced Data Engineering and Management skills with Databricks, AWS, Mongo DB, and Cassandra DB
- Mentioned for the attention to detail, accountability, and timely delivery of quality work in the evaluation

University of Maryland Baltimore County — Baltimore, MD
RTTP Math Coach — Oct 2023 - May 2024

- Raised basic Math speed of elementary/middle school students by 70% by practicing and exploring methods
- Boosted student productivity and engagement by 50% by planning, designing, and executing Session Frameworks
- Prioritized modules by selecting effective tactics for each student, improving interactions and responses

Redwood Algorithms — Bangalore, India
Social Media Associate — Sept 2022 - Oct 2022

- Captured the essence of businesses of five clients to incorporate in social media and drive the target audience
- Elevated customer engagement by 200% by analyzing trends and implementing in social media posts and ads

PROJECTS

Time-series Analysis of Exchange Rates of Foreign Currencies with US Dollar — Jan 2024 - April 2024

- Achieved a high-accuracy (97%) model by implementing a time-series analysis and forecasting using the ARIMA, SARIMA, and SARIMAX on the FRED Foreign Exchange data
- Researched micro-economic variables to be considered for the SARIMAX model, thus learning the domain deeply and understanding the relationships
- Created an interactive Dashboard with Power BI of the Exchange rates of 5 different countries and integrated Python with the FRED API auto-updating data with the weekly release to visualize the forecasts of exchange rates for the next 10 months

Customer Lifetime Value Prediction for Auto-Insurance Companies Jan 2024 - April 2024

- Attained a 91% accurate Customer Lifetime Value (CLV) prediction (Random Forest) model and segmentation to drive targeted marketing strategies
- Incorporated AWS S3 bucket for data storage by setting up API access with Python using Google Colab
- Developed a Power BI dashboard with CLV for different Insurance policies and premiums and hosted a website that predicts CLV for companies
- Designed a QnA Interface using *Langchain* Google's Gemini LLM API that converted human questions into SQL queries and extracted data from the database, enabling non-technical interaction with the data

Steam Review Analysis using Apache Spark and Hadoop in Python Sep 2023 - Dec 2023

- Led a group of three and sighted a 40% increase in the number of reviews on the Steam App in Nov 2021 from an 8GB dataset, accessed and analyzed using HDFS and PySpark, respectively
- Modeled an algorithm to recommend 5 games for new players using the Alternating Least Squares from Spark MLlib based on gaming history

Portfolio Optimization and Dynamic Dashboard with MS Excel, SQL, and Python June 2024

- Optimized the risk-return of a 5-stock portfolio using the Data Analysis and Solver add-ins in MS Excel
- Generated a portfolio transaction dataset using Python and YahooFinance API with appropriate constraints
- Established a MySQL connection between Python (SQLConnect) and MS Excel(ODBC) to enable auto-updation of data and proper data management
- Developed a dynamic dashboard in MS Excel with LOOKUPs and PIVOT tables, giving insights into the stock allocation and risks

Nutrition Dashboard for US Food Products with Tableau, SQL, and Python July 2024

- Published a user-friendly dashboard that allows custom diet planning and nutrient calculation on Tableau
- Cleaned the messy data, connecting MySQL and Python to prevent data losses and forming a flawless data pipeline

Image Classification for Breast Cancer Detection

- Implemented CNN using high-end Python libraries such as TensorFlow and Keras to classify sample images into probability groups to help detect Breast Cancer
- The model gave a left-skewed distribution of probabilities, i.e., it predicted most samples to be cancerous

See More on GitHub Or Visit the Portfolio

LEADERSHIP

Pondicherry University Puducherry, India

Class Representative - Integrated M.Sc. in Physics Jul 2017 - May 2022

- Represented 25 students to communicate students' requirements and faculty expectations in department meetings
- Scheduled Exam Timetable resolving schedule conflicts among different courses and departments

ACHIEVEMENTS

Certifications IBM Data Science Professional Certificate, Data Analysis with Microsoft Excel
Achievements Phi Kappa Phi Honor Society Member, GATE (Feb 2022), JAM (Feb 2017)
Publications Medium, Author @Towards Data Science

HOBBIES & ACTIVITIES

Writing

- Experienced in technical, professional, social, and personal writings, supported by a never-ending interest in learning and upskilling

Active Badminton player and National Athlete