

# RINDHUJA TREESA JOHNSON

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## EDUCATION

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### University of Maryland Baltimore County

Master of Professional Studies in Data Science

GPA: 4.0/4.0

Baltimore, MD

May 2024

### Pondicherry University

Master of Science in Physics

GPA: 3.61/4.0 Valedictorian

Puducherry, India

May 2022

## SKILLS

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### 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

### Soft Skills

Agile, Communication, Time & People Management, Problem-solving, Critical thinking,

Attention to detail, Adaptable & Team player

## EXPERIENCE

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### Graduate Assistant (Data Science), UMBC

Jan 2024 - May 2024

- Collaborated with the instructor to develop projects that enhanced students' experience with **cloud platforms and big data** processing with **Spark, Hadoop, Databricks, AWS, Mongo DB, and Cassandra DB**
- Streamlined the evaluation process of student work, increasing efficiency by 200% while adhering to grading criteria and providing detailed, constructive feedback
- Offered support to students, addressing their queries and helping them grasp concepts during office hours
- Mentioned for the attention to detail, accountability, and timely delivery of quality work in the evaluation

### RTTP Math Coach, UMBC

Oct 2023 - May 2024

- Enhanced elementary/middle school students' basic math speed by 70% through targeted practice and innovative teaching methods
- Boosted student productivity and engagement by 50% by planning, designing, and executing Session Frameworks
- Prioritized sessions to align with student feedback and improved student participation and output

### Social Media Analyst, Redwood Algorithms

Sept 2022 - Dec 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

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### [Time-series Analysis of Exchange Rates of Foreign Currencies with US Dollar](#)

- 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

- 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

- 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

- 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

- 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

## LEADERSHIP & EXTRA-CURRICULAR

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### Class Representative — Pondicherry University

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

### 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 — UMBC, Pondicherry University, High School

- Represented UMBC in numerous inter-university Badminton tournaments and UMBC Badminton Club member
- All India CBSE Schools Athletic Meet Participant - 2016, 2017

## CERTIFICATIONS

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- [IBM Data Science Professional Certificate](#)
- [Data Analysis with Microsoft Excel](#)

## PUBLICATIONS

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- Data Writer @Towards Data Science
- [medium.com/@rindhu1](https://medium.com/@rindhu1)

## ACHIEVEMENTS

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- [Phi Kappa Phi Honor Society Member](#)
- GATE (Feb 2022), JAM (Feb 2017)