

Carlos Marin

Houston, TX | 713-791-3494 | carlosmarinjr1@gmail.com | [Portfolio](#) | [GitHub](#) | [LinkedIn](#)

Data Scientist / Data Analyst

Data Scientist with a clinical research background and hands-on experience in machine learning, deep learning, and AI-driven solutions. Proficient in Python, SQL, and data visualization tools, with a track record of building predictive models and uncovering actionable insights. Adept at translating complex data into strategic decisions across healthcare and tech domains.

DATA SCIENCE TECHNICAL SKILLS

- **Programming & Data:** Python (Pandas, NumPy, Scikit-learn, Statsmodels, SQL, PySpark), Excel
- **Machine Learning & AI:** Supervised & Unsupervised Learning, NLP, Deep Learning, Neural Networks, LLMs (via IBM AI Developer Cert - In Progress), TensorFlow, Keras, PyTorch
- **Data Visualization:** Matplotlib, Seaborn, Plotly, Power BI, Tableau
- **Software & Web:** JavaScript, React, Express.js, Django, HTML/CSS
- **Tools & Cloud:** Git, Jupyter, VS Code, Google Colab, REST API's

TECHNICAL PROJECTS

Quantitative Analysis of Stock Market | [Github](#)

Conducted a comprehensive quantitative analysis of major tech stocks using Python to evaluate performance, volatility, correlations, and risk-return trade-offs for informed investment decisions.

- Visual and analytical comparison of each stock's risk (standard deviation) and average daily return using a custom-annotated scatter plot.
- Ranked visualization of volatility using color-coded bar plots with labeled values for easy interpretation..
- Correlation heatmap between stock closing prices to explore market co-movement patterns over time.

Optimizing Food Cost and Profitability | [Github](#)

Conducted profitability analysis for a food delivery service by extracting and standardizing discount data, calculating order-level costs, and simulating optimized commission and discount strategies.

- Extracted and standardized mixed-format discount data using custom functions to enable accurate cost calculations.
- Simulated new commission and discount strategies to identify optimal pricing for improved margins.
- Created clear, business-focused visualizations to communicate cost structures and profitability insights effectively.

Inflation Impact Analysis Using Python | [Github](#)

Analyzed the impact of inflation on the INR/USD exchange rate from 1980 to 2024 using correlation analysis and Purchasing Power Parity (PPP) theory.

- Analyzed historical inflation and exchange rate data for India and the U.S. to uncover macroeconomic patterns.
- Applied Purchasing Power Parity (PPP) theory to forecast expected exchange rates and assess real-world deviations.
- Visualized trends and conducted correlation analysis to evaluate inflation's impact on currency fluctuations.

PROFESSIONAL EXPERIENCE

Clinical Research Coordinator - Heart Failure, **Houston Methodist Hospital**, Houston, Texas 09/2021 - Present

- Managed clinical trials from patient recruitment to data integrity and regulatory compliance.
- Extracted and analyzed EMR datasets, creating structured data pipelines for eligibility analysis.
- Partnered with cross-functional teams to improve data quality, risk monitoring, and reporting processes.
- Supported probabilistic analysis and risk tracking through data collection and validation for outcomes.
- Coordinated with stakeholders and mentored junior staff on data management best practices.

EDUCATION & CERTIFICATIONS

IBM AI Developer Professional Certificate (In Progress)

Expected Completion: October 025

Flatiron School, New York, NY

Immersive Data Science Bootcamp program

January 2023

University of Houston - Downtown, Houston, TX
Bachelor of Science, Biological and Physical Sciences

May 2017