Carlos Ariel Espinosa Valdéz

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Summary

Motivated mathematician adept at leveraging data for informed decision-making. With a solid foundation in statistics, data analysis, problem-solving, and self-learning. Skilled in various data analysis and visualization tools including Python, R, SQL, Power Bi, and Tableau. Currently, I am seeking a position as a junior data analyst to apply my mathematical expertise, enhance my critical thinking skills, and contribute to the growth of the organization and its assets.

Education

Master of Science in Mathematics   *Guanajuato, Mx.*
Center for Research in Mathematics (CIMAT)   *August 2017 - July 2019*

Bachelor of Science in Mathematics (Summa Cum Laude)   *Jalisco, Mx.*
University of Guadalajara   *August 2012 - April 2017*

Certifications and Training

Completed

- Power BI Course: Data Analytics and Business Intelligence (View Certification)
- The Data Science Course: Complete Data Science Bootcamp 2024 (View Certification)
- Google Data Analytics Certificate (View Certification)

In Progress

- Python Essentials 1 (Syllabus)
- Data Analytics Essentials (Syllabus)

Work experience

Research Assistant   *Guanajuato, Mx.*
CIMAT   *March 2024 - Present*

- Performing research with applications related to coding theory.
- Main goal: Publish the results in a prominent mathematics journal.

Data Analyst   *Guanajuato, Mx.*
XVII Industrial Problem Solving Workshop (CIMAT)   *January 2024*

- Received an assignment from Harinera de Irapuato S.A. de C.V.
- Defined objectives.
- Established key indicators.
- Conducted exhaustive research on several topics.
- Applied ETL techniques to both public and private databases.
- Performed appropriate analysis using time series and neural networks.
- Presented findings and recommendations to the company.
- Improved the company's operational efficiency.

Teacher Assistant   *Guanajuato, Mx.*
CIMAT   *August 2020 - November 2023*

- Facilitated the understanding of complex concepts.
- Fostered an engaging learning environment for students with diverse backgrounds.
- Performed and graded homework and tests.
- Prepared weekly reports on student performance.

Research Assistant   *Jalisco, Mx.*
University of Guadalajara   *June 2015 - August 2016*

- Received a code originally developed by a researcher during her PhD.

- Converted the code written in C++ to Python.
- Identified improvements to the program.
- Created appropriate visualizations in MATLAB.
- Used partial differential equations to detect substances in the subsurface using waves.

RELEVANT SKILLS

Technical Skills

- Programming Languages: Proficient in Python, R, and MATLAB for data analysis and modeling.
- Statistical Analysis: Skilled in applying statistical techniques such as regression analysis, and hypothesis testing, and Bayesian inference.
- Data Visualization: Experienced in creating insightful visualizations using tools like Matplotlib, Seaborn, ggplot2, and Power BI to communicate complex findings.
- Database Management: Familiar with SQL for querying databases and extracting relevant datasets for analysis.
- Machine Learning: Understanding of machine learning algorithms and techniques for classification, regression, and clustering.

Analytical Skills

- Quantitative Analysis: Strong mathematical background with expertise in calculus, linear algebra, and probability theory.
- Problem-Solving: Ability to tackle complex problems, break them down into manageable tasks, and develop effective solutions.
- Critical Thinking: Adept at evaluating data, identifying patterns, and drawing meaningful insights to inform decision-making.
- Attention to Detail: Meticulous in reviewing and validating data to ensure accuracy and reliability in analysis.