DAVID CARLOS GARZA

Houston, TX 77004
Phone: 832-567-3204 | Email: david.c.garza@outlook.com
LinkedIn: https://www.linkedin.com/in/davidcarlosgarza/ | GitHub: https://github.com/david-garza

Summary

Data Analyst with a background in education, engineering performance benchmarking, and project time and cost estimating. Recognized for teaching and explaining technical subjects, team focused, and enjoys finding solutions for data problems. Graduate of Data Visualization / Analytics Bootcamp through Rice University Glasscock School of Continuing Studies.

Technical Skills

Tools: VBA, SQL, Python, PySpark, JavaScript, pandas, API, SQLAlchemy, PyMongo, Flask, Beautiful Soup, R and RStudio, Visual Studio Code, Visual Studio, Jupyter Notebook, Matplotlib, plotly, Leaflet, geoJSON, TIBCO Spotfire, Tableau, Git, GitHub, Google Colaboratory, scikit-learn, TensorFlow, Dataiku
Databases: SQL Server Management Studio, PostgreSQL, pgAdmin 4, AWS

Relevant Experience

Senior Engineering Technician   2015 – 2020
Hess Corporation   Houston, TX
Queried structured databases to create engineering, safety, and cost performance reports for central leadership teams. Trained engineers in the use of probabilistic modeling to create cost estimates for engineering projects. Supported partner groups with statistical, ETL, and visualization support ad hoc.

Key Accomplishments:
- Created an interactive visualization to view time based data using R and Tibco Spotfire saving the rock mechanics team the cost of purchasing additional proprietary software licenses.
- Created a real time Well Control Incident dashboard using Microsoft SQL Server and Tibco Spotfire saving time and improving efficiency in reporting and tracking high risk well control events.
- Wrote code that accounted for the intercept angle between a drill bit and formation bed in VBA that improved the pore pressure model and was incorporated in well planning in Malaysia.
- Analyzed and explained the frequency of subsea wellhead bolt failure using historical data, subject matter input, excel, and statistics that supported waiting to replace bolts at the next scheduled inspection instead of a costly early inspection.

Additional Experience

Engineering Technician   **2011 – 2015**
Hess Corporation   Houston, TX

Key Accomplishments:
- Wrote a company standard on drilling performance benchmarking that standardized the benchmarking process across global assets.
- Wrote a company standard on time and cost estimating for drilling and completions projects that standardized the estimating across global assets.

Physics Teacher   **2008 – 2011**
Macarthur High School   Houston, TX

Projects

Charity Analysis | https://github.com/david-garza/Neural_Network_Charity_Analysis.git
- Created a machine model to identify which charities would successful use funds granted
- Performed preprocessing, neural layer construction, selection of activation functions
- TensorFlow

Credit Risk Analysis | https://github.com/david-garza/Credit_Risk_Analysis.git
- Created various supervised machine learning models to classify loan applicants by high / low risk
- Performed preprocessing, under sampling, over sampling, and varied model
- scikit-learn

Engineering Analysis | https://github.com/david-garza/MechaCar_Statistical_Analysis.git
- Created a statistical report on the statistics of manufactured parts and performance
- Performed student t-test and plotting
- R, Rstudio, ggplot2

Education

Data Analytics Boot Camp Certificate: Rice University, Houston, TX
A 24-week intensive program focused on gaining technical programming skills in Excel, VBA, Python, R, JavaScript, SQL Databases, Tableau, Big Data, and Machine Learning.

Bachelor of Science Astrophysics: University of Arizona, Tucson, AZ