BARBARA BENITEZ
Data Analyst

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PROFESSIONAL PROFILE: Data Analyst

Having a PhD in mathematics and fifteen years of teaching experience in collegiate mathematics and statistics, I bring a unique skill set combines instructional best practices, analytical problem-solving, and a deep understanding of data and communication of complex ideas. I enjoy the challenge of problem solving and uncovering patterns in data. My strength is providing insight using mathematical tools and translating those insights into usable recommendations for stakeholders.

DATA PROJECTS

Skills: Data Viz | Excel |Tableau | SQL |Storytelling |Charts| Tables |LaTeX | Google Sheets

Health Care Data: Utilized SQL to create queries of data from 130 US hospitals
Skills: Aggregate functions | WHERE | GROUP BY | ORDER BY|CASE|DISTINCT|HAVING| LIMIT
Educational Data: Utilized Tableau to create a dashboard summarizing educational data and to provide actionable recommendations
Skills: Bar charts | Scatterplots | Line graphs | KPI | Dashboards
Food Delivery Data: Utilized Excel to provide insight about food delivery service and customers
Skills: Pivot tables | Aggregate functions | Line graphs |Correlation |Linear regression

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MACHINE LEARNING PROJECTS (Python)

General Tools: MATLAB |Scikit-learn I Pandas|Numpy|Seaborn |Matplotlib|Regression | Classification | Data cleaning | Scaling | GridSearch Hyperparameter tuning |Logistic regression | KNN | Decision Trees | Naïve Bayes | Ridge | Neural Networks | SVM |Model Evaluation |PCA|Pipelines|Cross-validation

Disease Data: Utilized classification algorithms to identify individuals with Alzheimer's disease using six machine learning models
Skills: Classification | Eliminated multicollinearity |Correlation matrix
Fraud Protection: Utilized classification to identify credit card transactions that were fraudulent and determined the expected increase in profit due to improved identification
Skills: Confusion matrix |Rescaling data |PCA | Type II errors
Wine Evaluation: Utilized regression algorithms to classify wine quality
Skills: Feature importances |Model accuracy |Pipelines |Bar graphs
Electricity Pricing: Utilized regression to estimate pricing on electricity
Skills: Regression | Pipelines | OneHotEncoding | Scaling |LabelEncoder |Line plots

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EDUCATION

University of Houston | Houston, TX **PhD in Applied Mathematics** 2007