Brian Cervantes Alvarez ❖ Data Scientist | Statistician

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EDUCATION

Oregon State University   **Sept. 2023 – Mar. 2025**
MS, Statistics   *Corvallis, OR*

♦ Developed a comprehensive understanding of theoretical and applied statistics through advanced coursework and research projects, focusing on data analysis, statistical modeling, and experimental design.

Willamette University   **Aug. 2022 – Aug. 2023**
MS, Data Science   *Salem, OR*

♦ Gained hands-on experience in data analysis using R, and Shiny to create interactive dashboards and compelling data visualizations; acquired expertise in machine learning techniques with Python, PyTorch, and scikit-learn.

Linfield University   **Aug. 2018 – May. 2022**
BA, Mathematics   *McMinnville, OR*

PROJECTS

United Kingdom Car Accident Shiny Dashboard Application   **Aug. 2024 – Sept. 2024**
Time Series   *Corvallis, OR*

♦ Developed an interactive Shiny application to analyze UK accident data, providing real-time visualizations and insights into accident trends and patterns. Implemented user-friendly filters for location, time, and accident severity, enhancing data-driven decision-making processes.

Applied Multivariate Analysis: Investigating Red & White Wines   **Nov. 2023 – Dec. 2023**
Statistics and Viticulture   *Corvallis, OR*

♦ Led comprehensive data analysis, including exploratory analysis and MANOVA tests, distinguishing chemical attributes in red and white wines, and implemented advanced classification models for precise categorization, achieving a 69.2% accuracy in quality prediction.

Predicting Severity Levels in Patients Based on Symptom Analysis   **May. 2023 – Jun. 2023**
Healthcare   *Portland, OR*

♦ Performed machine learning analysis using a random forest approach to predict patient severity levels, developing accurate rules and identifying key symptom combinations for classification into Mild, Moderate, and Severe categories.

WORK EXPERIENCE

Oregon State University   **Sept. 2023 – Present**
Graduate Teaching/Project Assistant   *Corvallis, OR*

♦ Led discussions and provided guidance to students in advanced statistical and data science methods, designed course materials emphasizing simulation studies, machine learning, and visualization techniques, and collaborated on the development of new Data Visualization and the university's first Data Science course.

The North Face, a VF Company   **Oct. 2019 – Nov. 2023**
Sales Associate   *Woodburn, OR*

♦ Leveraged customer data to optimize sales strategies and enhance customer experiences, utilizing analytical insights to drive informed decision-making.

TECHNICAL SKILLS

♦ **Certifications:** Analyze Business Data with SQL, Responsible Conduct of Research, Conflict of Interest
♦ **Programming Languages**: R, Python, SQL, HTML, JavaScript, CSS
♦ **Statistical Tools**: Hypothesis Testing, Regression Analysis, Experimental Design, Survival Analysis, GLMs, Hierarchical Models, MCMC, Nonparametric Methods, Bootstrap Resampling, PCA, Bayesian Statistics, Time Series, Spatial Statistics
♦ **Data Science Tools**: Github, Quarto, Docker, Jupyter Notebooks, RStudio, APIs
♦ **AI Tools**: LLMs, AutoML, Generative AI,, Transformer Models, Prompt Engineering, Hyperparameter Tuning, NLP,
♦ **Cloud Platforms**: Google Cloud, AWS

AWARDS

♦ **Posit Opportunity Scholarship**
   Recognized for contributions to the data science community