BRANDI REGER

Data Scientist

My eclectic work history and formal education experiences give me uncommon insights into understanding the human experience. I excel at developing clear solutions from data and thrive in challenging situations.

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EDUCATION

Codeup   2020
Data Science Certificate
Fully-immersive, project-based 20-week career accelerator that provides students with 670+ hours of expert instruction in applied data science.

University of Texas
Rio Grande Valley   2016 - 2019
Bachelor: **Multidisciplinary Studies**
Minors: Statistics, Geology & Anthropology
Graduated *magna cum laude*
Presented research at national and regional conferences such as Women in Statistics and Data Science and the Geological Society of America. President of Geology Club.

MILITARY EXPERIENCE

US Army   2011 - 2015
Aircraft Powerplant Repairer
Performed regular maintenance on the troops' fleet of helicopter engines.
Secret Clearance

WORK EXPERIENCE

Encotech Eng.   2007 - 2011
Austin, TX

CAD Manager
Projects in residential, industrial, educational, medical, and commercial sectors.

TECHNICAL SKILLS

Applied Statistics - SQL - Python - R - Pandas - Matplotlib - Machine Learning - Natural Language Processing - ETL - Git - Jupyter Notebooks - Tableau - Seaborn - Spark - ArcGIS

DATA SCIENCE PROJECTS

Capstone Project: Texas Covid Vulnerability Report   July 2020
As a member of a team, we pooled data from several federal and state sources to determine if socioeconomic indicators can explain the prevalence of COVID cases in Texas. Using our unique data set, we created Tableau dashboards and time series visualizations highlighting smaller counties to identify their vulnerability to COVID.

Predicting Programming Languages Using NLP   June 2020
Using the readme contents of ~300 Github repositories, my partner and I applied NLP techniques and compared Logistic Regression, Random Forest, and KNN classification models. Our final Random Forest model performed with an improvement of 90% over our baseline model.

Zillow Clustering   May 2020
Together with my partner, I used KMeans clustering techniques on the Zillow database and developed several polynomial regression models attempting to improve Zillow's estimate of the log error.

Telco Customer Churn Classification   April 2020
My partner and I compared multiple classification models to predict whether or not a customer would churn based on the details of their contract and history as a customer, resulting in an accuracy of 80%.

PERSONAL PROJECTS

Classification of Lithic Artifacts   Current
Using XRF chemical data, I implemented a suite of clustering techniques to generate labels for stone artifacts. These labels were then fed into a random forest classification algorithm which successfully identified unlabeled materials with an accuracy of 92%.

Lithic Raw Materials in the Lower Rio Grande Valley, South Texas and Northeast Mexico   May 2020
Peer reviewed analysis of 976 stone artifacts from museum and private collections in the Lower Rio Grande Valley, together with a geologic description of the region and its stone resources.