# Alan J Averett

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#### **EDUCATION**

## **Brigham Young University-Idaho**

Rexburg, ID

B.Sc. Data Science, Statistics; Major GPA: 3.8/4.0

Apr 2020 - Dec 2023

- Certifications: Web and Computer Programming (3.7/4.0); Machine Learning (4.0/4.0)
- Leadership: Chi Delta Society, Society of Hispanic Professional Engineers (SHPE), Data Science and AI Society

#### **EXPERIENCE**

## **WPA Intelligence**

Washington D.C.

Machine Learning Intern

Jul 2022 - Nov 2022

- Decreased production time (1 hr to 1 min) by building an automated script to clean and transform voter data, with SQL, R
- Proficient in tidyverse for data manipulation, cleansing, and transformation, for preparing raw data for database integration.
- Led the implementation of ODBC connections in R and SQL, orchestrating the seamless integration of *over 100 million records* of transformed voter data from several spatial data sources into a database

**FamilySearch** 

Salt Lake City, UT

Statistician

Sep 2023 - Present *automating* in-house tuned

• Eliminated 50+ fraudulent contractors in the African History Project by *developing and automating* in-house tuned anomaly detection methods in *Python* over 200k+ genealogical submissions; regularly presented abstracts to management

### **Mathematics Department BYU-Idaho**

Rexburg, ID

Data Science Society President, Chief Lab Manager

Mar 2023 - Sep 2023

- Led and coordinated data science society activities and meetings; mentored and supported project teams including weekly bootcamps to teach *data analysis/statistics and ML hyper parameter tuning*, over 6 teams of ~ 6-12 people each
- Managed, and trained all tutors for school-wide DS Lab, teaching Pandas, NumPy, PySpark, SQL, in DataBricks

Teacher's Assistant

May 2022 - Present

- DS Programming: Tutored data analysis, statistics, and basic ML in Python (Pandas, Sklearn) and SQL
- Data Wrangling and viz: Tutored complex data analysis and visualization with *R tidyverse* (dplyr, ggplot2 etc.)
- Big Data Programming: Tutored big data computation and analysis with PySpark and SQL in DataBricks
- Linear Algebra: Tutored both non-computational and computational linear algebra with Python's NumPy and SymPy

#### **CONSULTING**

## **Baltimore Mission (Spanish Outreach)**

Technology Consultant and Regional Manager

Baltimore, MD

Mar 2019 - Feb 2020

## Wilford Woodruff Papers

Rexburg, ID

Data Scientist

May 2023 - Dec 2023

- Provided actionable graphs and trends using time-series analysis and NLP (sentiment analysis and textual clustering)
- Delivered *interactive web app in Streamlit* that matched various corpus data together using text vectors (*NLTK*, *sklearn*)

#### **Ohio Voter Data Consulting**

Rexburg, ID

Founder, Data Scientist

Sep 2023 - Present

- Democraztized *big data* models for grassroots campaigns, *Google cloud computing* ML models for ~10 million rows in *Python's sklearn* for predictive analysis in voter behavior, visualizing data interactively with *R Shiny*, *Plotly*, *Quarto*
- · Awarded First in nationally recognized MLH hackathon for innovation and creativity by optimizing campaign outreach

### **SKILLS**

- Python: Pandas, NumPy, Sci-kit Learn, PySpark, Polars, Keras / Tensorflow, BeautifulSoup4, DataBricks
- R: CAR, Mosaic, RMarkdown, Tidyverse (dplyr, tidyr, stringr, forcats, lubridate, purrr, etc.)
- Visualization libraries: Streamlit, ggplot2, Matplotlib / Seaborn, Plotly Express, Altair
- Other Technical Skills: Microsoft Excel, SQL, MySQL, Git/GitHub, Quarto, LaTeX, Regex, Docker