

# Alan J Averett

832.856.4666 | ajaverett0@gmail.com | linkedin.com/in/ajaverett | ajaverett.github.io

## EDUCATION

### Brigham Young University- Idaho

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

Rexburg, ID

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

*Machine Learning Intern*

Washington D.C.

Jul 2022 - Nov 2022

- Created digestible reports for 80+ political campaigns by analyzing/visualizing voter data trends with machine learning models that predicted ideological disposition and turnout using R's tidyverse
- Significantly decreased polling production time by automating sampling methodologies using R's statistical libraries
- Increased accuracy and AUC for all future machine learning models by using GIS data to categorize over 100 million records of voter data into 12 granularities of population density using R's sf and other geospatial libraries

### FamilySearch

*Statistician*

Salt Lake City, UT

Sep 2023 - Present

- Eliminated 50+ fraudulent contractors in the African Oral History Project by developing in-house tuned anomaly detection
- Scrutinized 200k+ genealogical submissions using comparative analysis from several machine learning algorithms

### Mathematics Department BYU-Idaho

*Data Science Society President, Chief Lab Manager*

Rexburg, ID

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 machine learning over 6 teams of ~6-12 people each
- Managed, scheduled, and trained all tutors for all data science courses, school-wide for Data Science Lab (R and Python)

*Teacher's Assistant*

May 2022 - Present

- **DS Programming:** Tutored data analysis, statistics, and basic ML in Python (Pandas, NumPy, Sci-kit Learn)
- **Data Wrangling and viz:** Tutored complex data analysis and visualization with R tidyverse (dplyr, ggplot2 etc.)
- **Big Data Programming:** Tutored big data analysis and visualization in DataBricks (Polars, PySpark, Plotly, AutoML, etc.)
- **Business Statistics:** Tutored basic statistical analyses, theories, and methods with Excel
- **Linear Algebra:** Tutored both non-computational and computational linear algebra with Python (NumPy, SymPy)

## CONSULTING

### Baltimore Mission (Spanish Outreach)

*Technology Consultant and Regional Manager*

Baltimore, MD

Mar 2019 - Feb 2020

### Wilford Woodruff Papers

*Data Scientist*

Rexburg, ID

May 2023 - Dec 2023

- Provided actionable graphs and trends using time-series analysis and NLP (sentiment analysis and textual clustering)
- Delivered web application that matched corpus with historical journal data using text vectorization (NLTK, sklearn)

### Ohio Voter Data Consulting

*Founder, Data Scientist*

Rexburg, ID

Sep 2023 - Present

- Democratzied big data models for grassroots campaigns, utilizing machine learning for predictive analysis in voter behavior
- Awarded First Place in nationally recognized I-Hack hackathon for innovation 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, Git/GitHub, Quarto, LaTeX, Regex, Docker
- **Math Courses:** Calculus, Applied Calculus for Data Analysis, Linear Algebra, Intermediate Statistics, Applied Regression