# Alan J Averett

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

## 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
- 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**                                                                                             Salt Lake City, UT
*Statistician*                                                                                                Sep 2023 - Present
- 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, 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 viz. in **DataBricks (PySpark, AutoML, Polars, Plotly, etc.)**
- **Linear Algebra**: Tutored both non-computational and computational linear algebra with **Python's NumPy and SymPy**

## CONSULTING

**Baltimore Mission (Spanish Outreach)**                                                                   Baltimore, MD
*Technology Consultant and Regional Manager*                                                 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, **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 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