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 and Awards**: Data Science Society President, SHPE Founding Member, Winner of 3 School-wide Hackathons

EXPERIENCE

Corecodec   San Antonio, TX
Software Developer Intern   Dec 2023 - Present
- Transformed a manual 5-hour task into a streamlined 10-minute operation by engineering an advanced **Python script with Selenium** to automate the detection of unauthorized use of copyrighted software in mobile applications
- Utilized **Pandas** for efficient data management and analysis for scanning mobile application stores, downloading and extracting data, and **automating reports** to identify key indicators of copyright infringement for software usage

FamilySearch   Salt Lake City, UT
Statistics Intern   Sep 2023 - Dec 2023
- Eliminated 50+ anomalous entities in a worldwide initiative by **developing and automating** in-house tuned anomaly detection methods in **Python** for over 200k+ submissions of unstructured raw survey data
- Frequently delivered summaries of key findings of statistical analyses to the executive team

WPA Intelligence   SE Washington, DC
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 **SQL** and **R's tidyverse**
- Decreased production time (1 hr to 1 min) by building an automated script **in SQL and R** to clean and transform voter data
- Increased accuracy and AUC for all future machine learning models (~ 1-3 percent) 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

Mathematics Department BYU-Idaho   Rexburg, ID
Teacher's Assistant and Chief Lab Manager   May 2022 - 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**
- Tutored Business Stats, DS Programming, Data Wrangling and Viz., Big Data Programming, and Linear Algebra courses in **Python (Pandas, PySpark, Sklearn, NumPy, SymPy), R (tidyverse), SQL, and Excel** to 100+ students

Lone Star Polypac   Wimberly, TX
Technical Aide   June 2021 - April 2022

CONSULTING

Wilford Woodruff Papers   Rexburg, ID
Data Scientist   May 2023 - Dec 2023
- Provided actionable graphs and trends using **NLP** tools including **sentiment analysis** and unsupervised textual clustering alongside **time-series analysis** as part of the Wilford Woodruff production team in Python
- Delivered an **interactive web app** that cross-referenced religious texts with 19th century published journal entries by using a Bag-of-Words model to vectorize n-grams to find textual matches sorted by confidence using **Python's sklearn library**
- Created similarity algorithm by topic to model recommendations to increase user interaction time with company website

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**: Excel, Visual Basic for App. (VBA), SQL, MySQL, Git/GitHub, Quarto, LaTeX, Regex, Docker