

MOYO AJAYI

Data Scientist

907.306.2651 ♦ moyo.ajayi.ds@gmail.com

SUMMARY

A born and grown Alaskan, Moyo is a passionate data scientist who integrates analytical and computational methods to share meaningful insight. Employers will be hiring a data scientist who:

- uses 6+ years of experience collecting, cleansing, analyzing, and reporting to provide actionable data-driven insights to a variety of stakeholders
- can adeptly apply inferential statistics and machine learning using scikit-learn, MLOps, and other relevant packages to produce high-caliber work
- understands how to connect novel data science techniques to specific business questions

EDUCATION

PhD in Environmental Engineering Vanderbilt University, Nashville, TN	2016 - (Summer) 2022
MS in Earth & Environmental Sciences Vanderbilt University, Nashville, TN	2014 - 2016
Bachelor's in Environmental Biology Columbia University, New York, NY	2010 - 2014

TECHNICAL SKILLS & EXPERIENCE

Programming (Advanced)	Python, Git, Matlab, HTML & CSS
Programming (Experienced)	R, Web Scraping, Linux, SQL
IDEs & Libraries	VSCode, pandas, scikit-learn numpy, (beginning) Keras and Tensorflow
Data Management	Cluster Computing (GPU), Data Wrangling, Exploratory Data Analysis, Visualization (e.g. Streamlit, Gradio)
Algorithms	Supervised Classification & Regression, UMAP , LGBM , HDBSCAN , K-means, Monte Carlo Simulation, TF-IDF
Analytical Skills	Time Series Analysis, Feature Engineering, Multivariate regression, Hypothesis testing (and other inferential methods)

RELEVANT EXPERIENCE

ERM, Inc. Data Scientist	May 2021 - Present Denver, CO
· Global Climate Forecasting Reporting Tool: Developing tool to query, quantify, and automatically report current and projected data for a financial institution and its agribusiness assets. <ul style="list-style-type: none">· Delivered a python-based tool that connected user input to climate projects· Utilized advanced modules to organize extracted data into concise and dynamic reports	
· Machine Learning to Optimize Practices at Large Peruvian Copper Mine: Attacking two major objectives <ul style="list-style-type: none">· Helped a client to decrease the human manual workload and provided the client with predictive model framework that ranged from rock type classification to enhancing mill performance· Applied supervised ML techniques to predict rock domain from geochemical data (500k+ samples)· Employed non-linear dimension reduction (UMAP) and unsupervised ML methods (e.g., HDBSCAN) to effectively compress the wide data to two dimensions and organize the samples into meaningful clusters	
· NLP Classification of Legislature to Distinguish Relevant from Irrelevant to the Business and Clients <ul style="list-style-type: none">· Accessing a previously made database of regulations spanning American to Polish law ($\geq 100k$ regulations), NLP and ML supervised techniques were used to classify legislature from around the world that is and not relevant to the company and its clients	

- As project leader, provided the road map and developed the codebase to permit the preprocessing, exploration, optimization, visualization, and interpretation of the algorithms used to delineate relevant from irrelevant legislature
- These techniques will reduce the demand for humans to review the regulations by hundreds of hours.
- Will lead the deployment and maintenance of the product within the Azure ecosystem in 2022.

Data Science Research Associate, Data Science Institute (Vanderbilt)
Leveraged ML Techniques to Predict Teacher Churn for the State of Tennessee

Jul 2020 - Dec 2020
Remote Work

- Consulted with state education agency and produced supervised classification machine learning (ML) model with tidymodels (R) to evaluate and predict annual turnover for 65k+ teachers
- Developed a multitude of functions to clean and engineer features to run ML algorithms (e.g. Logistic Regression, Random Forest)
- Quickly absorbed R and tidyverse programming with a GPU cluster to provide effective contributions to the project
- Coded collaboratively in a core team of 5 members through git to build on top of existing code

PhD Candidate, Vanderbilt University
Linking Greenhouse Gases and Volcanic Emissions with
Data-Driven Strategies

Jul 2017 - 2021

- Orchestrated and implemented the scientific and logistic sampling design of more than 100+ samples of greenhouse gas measurements across two N. American volcanoes
- Ran inferential analyses to gain an understanding of the relationships between different locations within and between volcanoes
- Examined geospatial relationships between measurement sites
- Employed advanced statistical analysis to generate high-impact insight
- Published a [paper](#) the Journal of Volcanic and Geothermal Research on subset of analysis

PROFESSIONAL DEVELOPMENT

Leader of Data Science Computational Infrastructure Upgrade
ERM

- Tasked with the opportunity to transition the data science and climate teams from primarily local code development and collaboration on email toward centralized development (e.g., Azure, Anaconda) and git
- Created several standard operating procedures and other technical documentation to educate and train colleagues on more efficient methods of code development

Data Science Career Track (Python)
Online Data Science Education Platform

- Completed 100+ hours and over two dozen modules to gain certification
- Hundreds of hours on this platform were spent completing dozens of courses from basic programming to deep learning. Please click for [certificates](#)

AWARDS

Global Recognition Award
ERM, Inc.

Nov 2021

- Earned recognition from the CEO based on outstanding work in client focus, collaboration, and innovation. This award was given to approximately one in twelve employees in the N. America region.

1st Place - Oral Presentation
National Association of Black Geoscientists

Sep 2019

- Awarded 1st place for communicating results from gas sampling research in N. American volcanoes