# **JEFF ALEXANDER | Data Scientist**

[828-777-6000] · [jeff.ryan.alexander@gmail.com] · [LinkedIn] · [GitHub] · [Portfolio]

## SKILLS

Coding - Python | Pandas | Numpy | Scikit-learn | SQL | Web Scraping

**Machine Learning** - Regression | Classification | NLP | Neural Networks | Time Series | Deep Learning **Data Visualizations** - Matplotlib | Seaborn | Tableau

Software - JupyterLab | GitHub | Google Suite | Google Colab | AWS | Databricks | PySpark

# **EXPERIENCE**

## GENERAL ASSEMBLY, DATA SCIENCE FELLOW, Remote

[Nov. 2022-Mar. 2023]

- Quickly learned and immediately applied new technologies and methodologies to real world problems, including data visualization, data engineering, and machine learning.
- Projects include:

#### **Solar Generation Time Series Prediction:**

- > Achieved an electricity generation prediction model of within 3% of maximum output at 15-minute intervals through neural networks trained only on the generation historical data
- > Created an end-to-end product with Streamlit App, allowing a user to select different solar generation sites and view/download the electricity generation predictions
- ➤ Conducted post-model analysis illuminating constraints of the production model, yet when simple correction methods were applied, decreased the predictions' loss function by an additional 1.7%

#### Wildfire Size Prediction:

- Utilizing only open sourced data from APIs, a model improved wildfire size prediction by 30% compared to peer reviewed literature
- Constructed a model, solely based on the location and datetime of a reported wildfire incident, to predict the total acreage burned with a RMSE of less than 2 acres (size of fires up to 343,000 acres)
- Generated a production model to more efficiently deploy wildfire response resources- both financial and personnel

## **Reddit Analysis and Subreddit Classification**

- Scraped Reddit for over 10,000 posts from r/UFC and r/MMA using ShiftAPI
- ➤ Deployed over 50 models including RandomForest, AdaBoosted, Multinomial Naive Bayes, Stacked and Voting Classifiers–for an accuracy of 73.68%, over 23% better than baseline
- ➤ Identified top 50 features that increase Reddit Post Classification, as well as modeled various features such as Sentiment Analysis and Parts of Speech Analysis

## MURSION INC., SIMULATION COMMUNICATION COACH, Remote

[Dec. 2020 - Present]

- Coached over 1000 clients from companies such as Google, McKinsey, Coca-Cola, and Starbucks in empathy, emotional intelligence, and communication through innovative virtual-reality environments
- Helped create and streamline training scenarios and guidelines to optimize the short timeframe allotted for various clients, resulting in approximately 18% higher efficiency of top-used scenarios

## SOLIS FILMS (Startup), SCRUM MASTER/HEAD OF BROADCAST, Remote

[Mar. 2021-Sept. 2022]

- Contracted with companies such as NBC, Andreessen Horowitz, and the Walton Family Foundation to organize and execute high-pressure events
- Organized complex and encrypted broadcast networks and managed the technical production for a high-profile client's investor summit, raising over 1.2 Billion dollars in three days
- Spearheaded transition to Agile framework with cross-functionality between multiple teams as well as increased effective communication between cross-functional teams to better meet expectations and deadlines - which boosted client satisfaction and increased client retention by nearly 50%

# **EDUCATION**

Data Science Immersive Fellowship, General Assembly, Remote Bachelors of Science in Chemistry, UNC Chapel Hill, Chapel Hill, NC Scrum Master Certification, Scrum Alliance, Remote