# ANDREW MCLAUGHLIN

# **SUMMARY**

Data Analyst with background utilizing Python, SQL, Power BI, Excel, and more during the entire analytical process, including data wrangling, data visualization, and data storytelling. Experienced in applying machine learning techniques and models to big data. Currently seeking role as a data analyst.

## **EMPLOYMENT**

#### Comcast, Data Analyst, Philadelphia, PA

Feb. 2023 - Dec. 2023

- Implemented a cable box monitoring tool that helped save the company over 1 million dollars per month in maintenance expenses.
- Collected and managed data from millions of internet connected cable boxes, modems, and other pieces of network hardware.
- Created a machine learning model that analyzed incoming data streams to predict future intermittent activity.
- Planned for development an internet monitoring tool that will help identify and remedy unusually negative performance.

# **SKILLS**

PROGRAMMING LANGUAGES: Python, NumPy, Pandas, SciPy, SQL, SAS, C++

DATA COLLECTION: JSON, API, Web-Scraping

DATA VISUALIZATION: Matplotlib, Seaborn, Power Bl, Plotly, Excel

MACHINE LEARNING: Hypothesis Testing, Linear Regression, Logistic Regression, Classification, k-Nearest Neighbors, Random Forest,

XGBoost, Neural Networks, Computer Vision, Keras, Tensorflow

# **PROJECTS**

#### **Delaware Education Capstone**

Sept. 2022 - Oct. 2022

- Objective: Make a recommendation for staffing levels at schools in the state of Delaware that would maximize student performance on standardized tests.
- Method: Used three data sets of over one million rows each, performed exploratory data analysis using Excel, Pandas, and Python in Jupyter Notebook, then created an xgboost regression model of student performance.
- Results: Created a presentation that showed that student proficiency can be raised by 20% with optimal staffing levels, especially in administrative roles.

#### **Brain Tumor Capstone**

Oct. 2022 - Nov. 2022

- Objective: Make a neural network that can diagnosis brain tumors from input images.
- Method: Used data set of 4600 images, applied data augmentation using Keras to the images in Python, then built a convolutional neural network that classifies the images.
- Results: The neural network can successfully diagnosis a brain tumor from an image with 99% accuracy.

## **EDUCATION**

#### **University of Delaware**

Aug. 2022 - Dec. 2024

Master's Applied Statistics

• Relevant Coursework: Regression Analysis, Probability, Statistics, Data Base Management, Time Series Analysis, Survival Analysis

#### **Springboard Data Science Career Track**

July 2022 - Jan. 2023

Certification

- 6-month intensive course in Data Science, Machine Learning, Python and SQL.
- Portfolio: github.com/andmcllin

#### **University of Delaware**

Aug. 2010 - May 2014

Bachelor's Mathematical Sciences, Psychology

- Relevant Coursework: Mathematical Statistics, Probability, Linear Algebra, Multivariate Calculus, Data Structures, Database Design and Programming, Application Development
- 6x Dean's List