ANDREW MCLAUGHLIN

SUMMARY

Data Analyst with background utilizing Python, SQL, Power BI, 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.

SKILLS

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

DATA COLLECTION: JSON, API, Web-Scraping

DATA VISUALIZATION: Matplotlib, Seaborn, Power BI, 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 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 to the images 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.

EMPLOYMENT

Newark High School, Math Teacher, Newark, DE

Aug. 2020 - July 2022

- Planned and implemented a program of study that met the needs, interests, and abilities of over 200 students.
- Helped over 70% of students show significant improvement in computational and mathematical solving skills, exceeding targets set at the beginning of the year.
- Monitored, maintained and improved the working condition of over 100 computers, projectors, and smartboards.
- Collected, managed, and interpreted data from a variety of sources for the improvement of instruction using Excel.
- Completed over 40 Individual Education Plans by gathering and analyzing data to meet the needs of students.

EDUCATION

Springboard Data Science Career Track

July 2022 - Current

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