Mason Scott

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Education

University of Maryland College Park, MD
Bachelor of Science in Computer Science, Minor in Statistics *Expected: May 2026*

Experience

High Sierra Pools Frederick, MD
Pool Manager *May 2024 - Aug. 2024*

- Displayed leadership abilities to organize a team of lifeguards to perform daily duties
- Maintained Cleanliness of facilities including pools, bathrooms, and walkways
- Administered first aid and worked with EMS and police personnel during emergencies
- Exhibited quick thinking and problem-solving in response to dangerous situations

Lifeguard *May 2022 - Aug. 2023*

- Supervised swimmers and enforced rules to ensure swimmer safety
- Identified emergency situations or potential drownings and entered water for lifesaving measures
- Cleaned, brushed and vacuumed pool to keep clean

Kumon Urbana, MD
Volunteer Tutor *Aug. 2017 - April 2018*

- Tutored young students on math and reading fundamentals
- Graded assignments and organized educational materials

Projects

Air Quality Prediction App | *Python, StreamLit, TensorFlow, AWS, MySQL, OpenWeatherMap API, Plotly*

- Developed and deployed an LSTM-based air quality prediction model using TensorFlow, achieving a test RMSE of 0.1668, and integrated real-time data from the OpenWeatherMap API
- Built a scalable data pipeline using MySQL on AWS and created a user-friendly Streamlit web app for real-time air quality monitoring and predictions

Image Classifier CNN - Mask Detection | *Python, TensorFlow, Image Classification, TaiPy*

- Built and trained a CNN with TensorFlow to identify if a person is wearing a mask correctly, achieving 99.24% test accuracy
- TaiPy GUI for real-time image upload and predictions

Sorting Algorithm Benchmark Visualization | *C, Python, DSA, MatPlotLib, Seaborn*

- Implemented and optimized various sorting algorithms
- Created benchmark tests to measure performance and compare time complexities
- Developed Python visualizations using Matplotlib and Seaborn to illustrate the execution and efficiency of each sorting technique

Data Analysis Report (CMSC320 Class Project) | *Python, Pandas, MatPlotLib, Numpy, SciPy Stats*

- Statistical Analysis of Political Influence: Used Chi-square tests to identify how political affiliations affect moral judgments in Reddit AITA responses
- Data Processing and Visualization: Cleaned and categorized survey data, handled missing values, and created visualizations to highlight ideological differences
- Developed Python visualizations using Matplotlib and Seaborn to illustrate the execution and efficiency of each sorting technique

Technical Skills

Languages: Python, C, Java, SQL (MySQL), R, SAS, Rust
Frameworks: TensorFlow, Streamlit
Developer Tools: Git, AWS, VS Code, PyCharm, Jupyter Notebooks
Libraries: Pandas, NumPy, Keras, Scikit-Learn, Plotly, Matplotlib