Brennan Hurd

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Education

Duke University Durham, NC
Computer Science & Mathematics B.S., GPA: 3.7 Expected Graduation May 2024

Experiences

SpartanNash Grand Rapids, MI
Data Analyst / Data Engineer May 2023 – Present

Established a novel regression testing framework in Python, ensuring data consistency in the company's Snowflake database throughout iterative codebase updates. Revamped Power BI dashboards by integrating newly recorded data through underlying data transformations in DAX.

Duke Field Hockey Durham, NC
Data Analyst July 2022 – Present

Spearheaded the founding of the Duke field hockey data analytics team. Cleaned and analyzed nearly 10,000 unique game data points in Python. Implemented an end-to-end data pipeline in Tableau to automate the process of providing strategic insight into formation and personal improvements through visualizations.

Durham Bulls Durham, NC
Stringer, Kinetrax Operator Apr 2022 – Sep 2022

Managed biometric data collection software Kinetrax and Hawk-eye, tracking software Trackman and historical baseball records to identify pitch-types of pitchers in real time. Gained experience with in-house data cleaning post-collection, as well as how data flows within the organization.

You Lab, Duke University Durham, NC
Research Assistant (BME) Aug 2021 – May 2022

Aided in training a convolutional neural network by collecting over 400 in vitro bacterial growth samples to predict growth patterns by environmental factors. Refactored mechanical MATLAB bacterial growth simulation code into Python; empirical testing saw an 11 percent increase in speed.

Projects

MLB All Star Predictor: *allstarstats.xyz* Python (Flask)

Full stack web application that aimed to predict MLB All Star Game selections using a logistic regression machine learning model based on historical ESPN batting data from the past 20 years. Predictions were refreshed daily as new data was web-scraped. Incorporated elementary frontend development, cloud hosting to publish the website.

Historical MLB Game Visualizations: *mlb-historical-data-plots.streamlit.app* Python (Streamlit)

Visualization web application that leverages web-scraped MLB game data from Baseball Reference to calculate the number of games a team is from an even record on a specific date. Using this scraped data, it can generate various representations, including plots for individual teams, pennant races, or playoff races for any year from 1970 to 2022.

Skills & Technical Tools

Languages: Python, SQL, Java, C
Technologies: Git, Tableau, Power BI, Excel

Volunteering

Students to Scholars Durham, NC
Middle school tutor Aug 2021 – May 2022

Partnered with the Boys and Girls Club of Durham to assist low-income middle scholars with free and accessible math tutoring weekly throughout the school year.