Jason Lott
Computer Science and Mathematics
University of Maryland, College Park

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GitHub Profile
LinkedIn Profile

Education

•University of Maryland, College Park *2025*
B.S. in Computer Science and Mathematics GPA: 3.91

•Montgomery Blair High School *2021*
High School Diploma Weighted GPA: 4.4

Experience

•University of Maryland Mathematics Department *May 2024 - Present*
Research Assistant under Professor Yanir Rubinstein College Park, MD
- Assisted in research using Prime Color Optics cameras and Theia3D software to capture high-definition videos of basketball players taking shots and accurately identify and track the location and rotation of each limb of the shooters.
- Processed and analyzed data on shooter limb positions, leveraging strong skills in Python and key libraries including Pandas, NumPy, Matplotlib, and Plotly.
- Applied advanced concepts in linear algebra and geometry to interpret data and derive meaningful insights.
- Contributed to the development of visualizations and analytical reports to support research findings.

•University of Maryland Baseball *September 2022 - Present*
Student Manager: Data, Coding College Park, MD
- Use data collected by the team to create insights to help the team succeed.
- Compiled diverse data sets to create scouting reports before every series.
- Used Python and R to create visualizations and models to assess player performance.

•Highmark Health *May 2023 - January 2024*
Application Developer Intern Pittsburgh, PA
- Worked with business analysts to gather requirements and design solutions.
- Developed and implemented Apex classes and triggers in Salesforce CRM.
- Created and managed custom objects and fields.

Personal Projects

•Time Series Analysis of Box Scores *May 2024*
Final project for MATH498R "Mathematics of Sports Performance Analytics" (completed with classmate Arthur Lin)
- Tools & technologies used: Python, Pandas, Numpy, Scikit-Learn, NBA API, Latex
- The goal of our project was to track personal and team statistics over time during games and seasons and explore the formulas of many advanced statistics. Utilizing the NBA's public API, we created visualizations to track how one player or team's traditional and advanced stats accumulated throughout the course of one game or season. Finally, we used a few regression techniques to approximate the formula for true shooting percentage, which has a known formula, and Player Production Average (PPA), which has an unknown formula. All code, Latex, and the final paper can be found on Github.

•Pitch Movement Synergy *April 2023*
Project completed for the University of Maryland Baseball team (completed as student manager)
- Tools & technologies used: Python, Jupyter Notebook, Pandas, Numpy, Matplotlib
- Using pitch data collected by Yakkertech Systems, I created a visualization to assess pitchers' performance through pitch movement synergy. All code and output graphs can be found on Github.

Technical Skills and Interests

Languages: Python, R, SQL, Java, Ruby, OCaml, Rust, C, Swift, Apex
Developer Tools: Salesforce
Frameworks: Python - Pandas, Numpy, Scikit-Learn
Coursework (completed with A±): Introduction to Machine Learning, Introduction to Data Science, Mathematics of Sports Performance Analytics, Application of R for Data Science, Databases For All (SQL), Applications of Linear Algebra, Advanced Calculus I, Theory and Methods of Statistics
Areas of Interest: Data science, sport analytics, performance evaluation

Positions of Responsibility

•Vice-President(D2 Co-Coach), University of Maryland Club Baseball *July 2023 - Present*

Achievements

•Dean's List Semester GPA of 3.5 or above *Fall 2021, Spring 2022, Fall 2022, Spring 2023, Fall 2023, Spring 2024*

•AP Scholar with Distinction Awarded for scoring a 3 or higher on 5 AP exams *Spring 2021*