

Jason Lott

Computer Science and Mathematics
University of Maryland, College Park

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🐙 GitHub Profile
🌐 LinkedIn Profile
📁 Personal Portfolio

EDUCATION

University of Maryland, College Park

B.S. in Computer Science and Mathematics

2025

GPA: 3.91

Montgomery Blair High School

High School Diploma

2021

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
- Tracked personal and team statistics over time during NBA games and seasons and explored the formulas of many advanced statistics. Utilizing the NBA's public API, we tracked how a player or team's traditional and advanced stats accumulated throughout the course of a game or season. Finally, we used regression techniques to approximate the formulas 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, sports 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