### **EDUCATION**

Wheaton College Wheaton, IL

B.S. in Applied Mathematics

August 2020 - May 2024

- Cumulative GPA: 3.77

- NCAA Division III Baseball Player, Team Captain

## WORK EXPERIENCE AND PROJECTS

# **Wheaton College**

August - December 2022

Teaching Assistant for Linear Algebra

- Offered help sessions weekly for students to work on projects, homework, or review tests

# **Reds Hackathon Project**

February 2024

- Collaborative advanced data analysis working with large data sets of MLB statistics. Used predictive modeling to estimate which pitchers would be better suited in a new role.

### **Primetime Baseball Tournament**

May - August 2021

Staff

- Collected gate fees and uploading final scores for accurate standings
- Ensured teams had equipment necessary for games to run smoothly, fielded questions from team managers and players

## Study on 2023 MLB Disengagements Rule/Effects on Base Stealing

December 2023

- Calculated an Expected Runs matrix using Retrosheet play-by-play event files for the 2022 MLB season
- Used Ronald Acuña Jr.'s stolen base percentage from 2023 to calculate expected run value for the scenario Acuña Jr. is attempting to steal second with no outs.
- Modeled the effects of the new rule using the game theory concept of a finitely repeated game of imperfect information, solved for equilibrium payoffs and strategies for both the pitcher and Ronald Acuña Jr.

#### ADDITIONAL INFORMATION

Programming languages: R, Python

Proficient in Excel