Logan Donaldson

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Personal Portfolio: https://github.com/logan-donaldson

EDUCATION

Johns Hopkins University Baltimore, MD
Bachelor of Science, Applied Mathematics and Statistics (GPA 3.94) Expected May 2022
Master of Science in Engineering, Data Science Expected May 2023

Honors: Naddor Prize ($500 cash prize for significant achievement in applied math related academic and extracurricular activities), 2020-2021 Albert and Elaine Slechter Scholarship for Engineering Undergraduates at the Johns Hopkins University, Dean's List every semester
Relevant Courses: Machine Learning (Fall 2021), Intro to Data Science (Fall 2021), Applied Statistics & Data Analysis, Intermediate Programming (C++), Data Structures (Java), Statistics, Probability, Optimization I, Optimization II, Linear Algebra, Game Theory, Calculus I-III

TECHNICAL SKILLS - COURSERA CERTIFICATIONS ARE BOLDED

Java, Python (including **pandas** & **Matplotlib**), **SQLite**, MATLAB, Git, Jupyter Notebooks, Integer Linear Programming, Optimization Modeling, Linear Regression Modeling
Used extensively in the past: C++, R (for linear regression)

RELEVANT WORK EXPERIENCE

Johns Hopkins University Baltimore, MD
Introduction to Optimization Teaching Assistant August 2020 - July 2021
Applied Statistics and Data Analysis Teaching Assistant August 2021 - Present

- Teach weekly discussion section for ~15 students and hold office hours
- Coordinate with other teaching assistants to form a rubric and grade exams/homework

Johns Hopkins University Baltimore, MD
MiLB Scheduling Intern (see GitHub portfolio for more info) June 2020 - August 2020

- Modeled and produced multiple 2021 minor league baseball schedules in terms of integer linear optimization programs using MATLAB and Gurobi; models consisted of ~13,000 variables/ ~10,000 constraints and were solved via a SGI UV 2000 supercomputer running Linux
- Corresponded with Southern League president to understand desired parameters and constraints

RESEARCH EXPERIENCE

Johns Hopkins Baseball Scheduling Group Baltimore, MD
Student Researcher (see GitHub portfolio for more info) September 2019 - Present

- Modeled and produced 2021 umpire crew schedules currently in use by both the Triple-A West MiLB league and Appalachian League using integer linear programming
- Corresponded with an MLB official to understand the unique umpire scheduling problem

Johns Hopkins Sports Analytics Research Group Baltimore, MD
Student Researcher (see GitHub portfolio for more info) September 2020 - Present

- Collaborated with the Baltimore Ravens analytics team on linear regression models to predict length of NFL punt returns using a proprietary play-by-play data set with ~130,000 entries
- Concluded long punt returns were primarily random events with only ~15% of punt return data able to be explained by in-game variables