

EDUCATION

COLORADO SCHOOL OF MINES, Golden, CO
B.S., *magna cum laude*, Applied Mathematics - Statistics
Minor in Computer Science
Dean's List

May 2019

Fall 2015 - Spring 2019

EXPERIENCE

ANALYST, BASEBALL ANALYTICS
Baltimore Orioles, Baltimore, MD

Summer 2019 - Present

- Used machine learning techniques in R and Python to help create effective metrics from player tracking data.
- Designed tools to help users access and analyze data through Django and React.
- Created interactive data visualizations with React and d3.js.
- Scraped and maintained a variety of 3rd party datasets with Python.

DATA SCIENCE DEVELOPER INTERN
Arrow Electronics, Centennial, CO

Summer 2018

- Created a proof-of-concept product recommender system using Python to improve relevance of current recommendations to customers.
- Used Agile principles to manage requests of business users.

STUDENT ASSISTANT - CONTROLLER'S OFFICE
Colorado School of Mines, Golden, CO

Fall 2017 - Summer 2019

- Assisted in maintenance of queries used in reporting.
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SKILLS

- Use of Python, R, and MATLAB to perform statistical analysis
 - Providing clear visualizations of data using ggplot2, matplotlib, and d3.js
 - Construction of machine learning models within tidymodels, scikit-learn and keras
 - Experience with relational (PostgreSQL) and non-relational (MongoDB) databases
 - Creating professional documents in \LaTeX
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PROJECTS

NFL BIG DATA BOWL

January 2021

Used state-of-the-art player tracking data provided by the NFL to evaluate defensive skills and produced a shiny application to present results to potential decision makers.

CAPSTONE - OZONE POLLUTION

Spring 2019

Worked with NOAA to conduct research on a newly created dataset detailing global surface level ozone pollution. Examined the relationship between national economic growth and ozone pollution levels and used change point analysis to determine areas with significantly improving or worsening conditions.

SPATIAL STATISTICS - MERCURY POLLUTION ANALYSIS

Fall 2018

Implemented kriging methods in R to analyze mercury pollution data from the NADP and predict locations with potentially problematic levels of pollution outside of the dataset.