

**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

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**EXPERIENCE**

BASEBALL ANALYST  
Baltimore Orioles, Baltimore, MD

Summer 2019 - Present

- Used machine learning techniques in R and Python to create tools with Statcast data that informed team decisions.
- Created and maintained datasets with Python framework Django.
- Produced interactive data visualizations React and d3.js

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.
- Analyzed inventory data with Python to improve resource management and predict slow moving inventory.
- Used Agile principles to manage requests of business users.

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

Fall 2017 - Summer 2019

- Assisting 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 L<sup>A</sup>T<sub>E</sub>X
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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 concise 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.