

MATTHEW KAYE

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in kayem20

🔗 mrkaye97

EXPERIENCE

Data Scientist

CollegeVine

📅 Sept 2020 – Present

📍 Boston, MA

- First member of the CollegeVine data science team

Baseball Operations Fellow

Baltimore Orioles

📅 Mar 2020 – Sept 2020

📍 Baltimore, MD

- Created a fully Bayesian, simulation-based projection system for MLB player performance over a six year time horizon
- Created an Gradient Boosting- and simulation-based projection system for a minor league player's MLB performance
- Created a gamma hurdle regression framework to predict free agent salaries
- Implemented a robust-to-multimodality version of the Metropolis-Hastings algorithm to determine the optimal way to position our defense against a specific hitter
- Worked on a variety of day-to-day data science tasks related to game strategy and player evaluation

Research Intern

Federal Reserve Bank of St. Louis

📅 June 2019 – Aug 2019

📍 St. Louis, MO

- Prepared new data series from the BLS, IMF, and more for upload to FRED, using pandas for data wrangling
- Fit neural network and multinomial naïve Bayes models to apply correct descriptive tags to FRED series to improve search performance

Econometrics Teaching Assistant

Carleton College Department of Economics

📅 Mar 2019 – June 2019

📍 Northfield, MN

- Ran semiweekly sessions to help econometrics students master course material, improve their R and \LaTeX skills, and hone their statistical intuition.
- Helped students complete homework assignments and projects and prepare for exams
- Graded homework assignments

Statistics Lab Assistant

Carleton College Department of Mathematics

📅 Sept 2018 – June 2019

📍 Northfield, MN

- Explained and walked through examples of concepts in statistics courses, including (but not limited to) data cleaning, hypothesis testing, exploratory data analysis and visualization, and modeling
- Worked with students on important R and debugging skills

SKILLS

R Python Git SQL
Java Excel Tidyverse / Caret / Parsnip
Pandas / Numpy / Scipy / Scikit-Learn

Data Wrangling Data Visualization
Bayesian Modeling and Inference
Machine Learning

LANGUAGES

English ● ● ● ● ●

Spanish ● ● ● ● ●

Swedish ● ● ● ● ●

French ● ● ● ● ●

Portuguese ● ● ● ● ●

EDUCATION

B.A. Economics and Mathematics

Carleton College

📅 Sept 2016 – Nov 2019

Economics Thesis: *The Effect of Transit on Life Satisfaction: A Multilevel Modeling Exploration of Urban Happiness*

Mathematics Capstone: *Dynamic Linear Models and the Kalman Filter*

Choate Rosemary Hall

📅 Sept 2013 – June 2016

INTERESTS

Baseball Browsing r/AskReddit
Cooking Running Minimalism
Skiing Data Visualization
Fantasy Novels Solo Travel
Nature & Architecture Photography