MATTHEW KAYE

mrkaye97.github.io

@ mrkaye97@gmail.com

(646) 853-5997

in kayem20

mrkaye97

EXPERIENCE

Data Scientist

CollegeVine

- Sept 2020 Present
- Cambridge, MA
- First member of the CollegeVine data science team. Responsible for establishing data science workflow best practices, building out a modeling pipeline, and providing easy-to-use data science tools to other members of the team
- Created a school recommender system using collaborative filtering to allow us to intelligently recommend new colleges to our users
- Clustered users with a modified K-Prototypes algorithm to allow for missing values in the distance calculation
- Advised on CollegeVine survey conducting and analyzed results for use in published reports on college admissions
- Serving as a subject matter expert for everyday statistics- and data science-related questions

Open-Source R Developer

slackr

- Oct 2020 Present
- Current author and maintainer of slackr, an R package for connecting R to Slack with 200k downloads
- Working on package improvements with much help from the R community, including improving documentation to help with setup and debugging, improving error messaging, setting up prepackaged Slack apps to make setup easier, improving the way the package interfaces with the Slack API, and setting up CI (GH Actions) and unit testing to test the package when changes are made
- Helping users work through bugs and questions submitted in issues, reviewing PRs, and doing other everyday package maintenance tasks

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
- Modeled free agent salaries with a gamma hurdle regression framework
- 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

SKILLS

Languages:

Haskell Java Python R SQL

Frameworks, Software, and Tools:



Data Science:

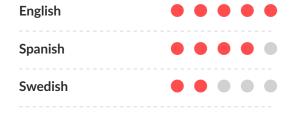
Bayesian Modeling and Inference

Data Wrangling Data Visualization

Machine Learning Statistical Inference

Time Series Modeling

LANGUAGES



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