# **MATT KAYE**

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in kayem20

# **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 modeling pipelines, helping teammates do rigorous, thorough data analysis, and explaining data scientific methods to other members of the team to democratize data science work at CollegeVine
- Transitioned our chancing algorithm (used by hundreds of thousands of students to get their chances at over 1,500 colleges and universities) away from a rules- and heuristics-based model to an ML-forward approach using feature engineering that incorporates expert knowledge of college admisions and rigorous testing and validation of the model
- Implemented a dashboard with sequential testing tools to help CollegeVine product managers run tests more quickly without sacrificing statistical rigor
- Serving as a subject matter expert for everyday statistics- and data science-related questions

# Open-Source R Developer

#### slackr & fitbitr

- Oct 2020 Present
- $\bullet$  Current author and maintainer of slackr, an R package for connecting R to Slack with 210k+ downloads
- ullet Author and creator of fitbitr, an R package that streamlines pulling Fitbit user data via the Fitbit API
- Responsible for all aspects of package development and maintenance, including general maintenance tasks, implementing new methods, improving error handling, writing unit tests and setting up checks in CI, writing descriptive documentation, and more
- 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:

AWS brms Docker

Excel Git Heroku

Numpy Pandas R Shiny

Scikit-Learn Tidyverse + Tidymodels

#### **Data Science:**

Bayesian Modeling and Inference

Data Wrangling Data Visualization

Machine Learning Statistical Inference

Time Series Modeling

# LANGUAGES

English

Spanish

Swedish

# **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