

# MATT KAYE

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🔗 mrkaye97

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in kayem20

## EXPERIENCE

### Data Scientist

#### CollegeVine

📅 Sept 2020 – Present

- First member of the CollegeVine data science team. Responsible for establishing data science best practices, building out modeling, ETL, and MLOps infrastructure, helping teammates do rigorous 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. Built expert domain knowledge into the model features and made product-first modeling choices to ensure intuitive model behavior for users
- Built a dashboard with sequential testing tools and helped explain the benefits of sequential testing to our PMs to let them run A/B tests more quickly without sacrificing statistical rigor
- Created a multi-part recommender system which allowed us to suggest new colleges to students and to suggest "top candidates" to our college partners, driving leads and applications for colleges and universities
- Built out a feature store to improve the data science developer experience (DX) at CollegeVine. The feature store has let us write more testable, maintainable code and helps us iterate faster by having a single source of clean data and ML features. It's also allowed us to perform common BI tasks more easily
- Responsible for owning all components of the data science process, including wrangling data, doing data analysis, building and validating models, deploying models to production (generally as Dockerized microservices on Heroku), and monitoring models and APIs in production

### Open-Source R Developer

#### slackr & fitbitr

📅 Oct 2020 – Present

- Current author and maintainer of *slackr*, an R package for connecting R to Slack with 215k+ downloads
- 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 implementing new methods, improving error handling and messaging, writing unit tests, establishing and maintaining a CI/CD pipeline, writing descriptive documentation, helping users work through issues and bugs, reviewing PRs, and more

### Baseball Operations Fellow

#### Baltimore Orioles

📅 Mar 2020 – Sept 2020

- 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
- Contributed to a Markov Chain Monte Carlo approach to determining optimal shifts against opposing hitters
- Worked on a variety of day-to-day data science tasks related to game strategy and player evaluation

## EDUCATION

### Bachelor of Arts Economics, Mathematics

#### Carleton College

📅 Sept 2016 – Nov 2019

#### Choate Rosemary Hall

📅 Sept 2013 – June 2016

## SKILLS

### Programming Languages:

R Python Shell Scripting SQL

### Frameworks, Software, and Tools:

Airflow AWS CircleCI Docker  
Git Github Actions Heroku  
MLFlow {{plumber}} {{shiny}}

## INTERESTS

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