# **MATT KAYE**

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### **EXPERIENCE**

#### **Data Scientist**

#### CollegeVine

Sept 2020 - Present

- First member of CollegeVine's data team. Responsible for all kinds of data projects, maintaining the codebase, integrating new tooling, and onboarding new team members.
- Promoted a culture of shipping data scientific products with software engineering best practices, including unit and integration testing and a CI/CD process.
- Devised and implemented CollegeVine's Chancing model, used by hundreds of thousands of students and families every year to understand their chances of admission at their favorite schools.
- Created a recommender system to suggest new colleges to students. School recommendations also powers affinity scoring, a major component of our college product and sales process driving hundreds of thousands of dollars in revenue.
- Built a sequential testing toolkit to enable our team to call A/B tests more quickly without sacrificing statistical rigor, often cutting A/B test runtimes by half or more.
- Built out our first data warehouse for analytics, helping teammates uncover insights into all aspects of our business more quickly and correctly.
- Build and optimized data pipelines moving billions of rows from raw sources into our data warehouse to be consumed by downstream users.
- Introduced new tooling (dbt, Airflow, MLFlow, AWS stack) and owned its adoption by the team and integration into the codebase.
- Owned the deployment and monitoring of machine learning models in production, generally as REST APIs packaged up as Dockerized microservices and deployed on Heroku.

### **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
- Devised 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

## **PROJECTS & OPEN-SOURCE**

- Contributor to MLFlow, an open-source platform for managing the machine learning lifecycle.
- Current author and maintainer of slackr, an R package for connecting R to Slack with 350k+ downloads.
- Contributor to recmetrics, a python library for evaluating recommender systems.
- Author and creator of lightMLFlow, a lightweight, opinionated R wrapper for the MLFlow REST API.
- Author and creator of fitbitr, an opinionated R wrapper for the Fitbit API.

### **EDUCATION**

Bachelor of Arts Economics, Mathematics

#### **Carleton College**

**Sept 2016 - Nov 2019** 

### **Choate Rosemary Hall**

**Sept 2013 - June 2016** 

### **SKILLS**

# Programming:

Bash Python R SQL Frameworks, Software, and Tools:

AWS Tooling (Redshift, S3, Batch, etc.)

Airflow CI/CD (Circle, GHA)

dbt Docker Git Heroku

MLFlow {{plumber}} {{shiny}}

### **HOBBIES**

Distance running

Learning Haskell

Low and slow cooking

Nature & architecture photography

Reading fantasy novels

Skiing chop and powder

Solo traveling + hostel hopping