

# Andrew Robert McBurney

Software Engineer | (289) 241-7988 | andrewrobertmcburney@gmail.com

## Workplace Experience

**Software Engineering Intern** Jan. 2018 – Apr. 2018  
Datadog New York, NY | USA

- >> Implemented a persistent caching system for Homebrew, improving performance of the `brew linkage` command by 97%; wrote a [blog post](#) detailing the analysis & optimization.
- >> Built an [open-source](#), self-hosted server for managing Trello cards based on GitHub events, allowing teams to incorporate community contributions into their agile sprints.

**Software Engineering Intern** May 2017 – Aug. 2017  
Doximity San Francisco, CA | USA

- >> Created an internal web scraper to query GitHub's GraphQL API to find potential hires for engineering outsourcing.
- >> Implemented a redis-based locking mechanism for an internal deployment tool restricting the number of deployment jobs to one job per environment.

**Software Developer Intern** Sep. 2016 – Dec. 2016  
Vena Solutions Toronto, ON | Canada

- >> Optimized SQL queries solving a n+1 query problem by fetching lazily loaded object members before serialization, decreasing mean response rate by 99% (~1m to <1s).
- >> Placed second in a pair-programming unit test competition involving all developers at the company (~60 engineers), judged by the quality and quantity of tests written.

## Open Source Experience

**Fastlane** Feb. 2018 – Present  
Mobile Continuous Integration [github.com/fastlane/ci](https://github.com/fastlane/ci)

- >> Core contributor to [Fastlane Tools](#), helping build the backend infrastructure for their mobile-first continuous integration system.
- >> Third-highest number of [commits contributed](#); over forty [pull requests merged](#).

**Conductor** Sep. 2017 – Dec. 2017  
Distributed Job-Scheduling System [github.com/AndrewMcBurney/conductor](https://github.com/AndrewMcBurney/conductor)

- >> Co-implemented a distributed job management system for registering workers, and scheduling jobs to execute on them, allowing for conditional scheduling.

**Emerald Language** Sep. 2016 – Dec. 2017  
HTML5 Templating Engine [github.com/emerald-lang](https://github.com/emerald-lang)

- >> Designed and implemented a whitespace-delimited HTML5 templating engine with support for variable scoping, interpolation, iteration, and conditional logic.

## Leadership Experience

**Vice President, Academic** Sep. 2016 – Dec. 2017  
Waterloo Engineering Society Waterloo, ON | Canada

- >> Coordinated professional development events for hundreds of engineering students such as tech talks, career fairs, résumé critiques, and interview skills workshops.

 @armcburney

 andrewrobertmcburney.com

 [github.com/AndrewMcBurney](https://github.com/AndrewMcBurney)

## Languages

Ruby  
Python  
TypeScript  
JavaScript  
Scala  
C++

## Technologies

Ruby on Rails  
Sinatra  
Flask  
Angular  
Node.js  
PostgreSQL  
MySQL  
SQLite  
Redis  
Docker  
Vagrant  
WebGL  
HTML5 (Slim, Pug)  
CSS3 (SCSS, SASS)

## Interests

Distributed Systems  
Concurrent Programming  
Functional Programming  
Computer Graphics  
Recording Music

## Education

Bachelor of Software Engineering  
University of Waterloo, Waterloo ON  
Sep. 2014 – Apr. 2019