

# Andrew Robert McBurney

Full Stack Developer | Student Leader | Aspiring Engineer | Musician

## Workplace Experience

### Doximity

Software Engineering Intern

San Francisco, CA

May 2017 — Aug. 2017

- >> Converted background job processes from `resque` to `sidekiq` in internal deployment tool, and **implemented a redis-based locking mechanism** for restricting the number of deployment jobs to one job per staging/production environment  
(*Ruby on Rails, Redis*)
- >> Created an internal web scraper to query GitHub's GraphQL API to find potential hires for engineering outsourcing: [andrewrobertmcburney.com/blog/graphql-vs-rest](http://andrewrobertmcburney.com/blog/graphql-vs-rest)  
(*Ruby, GitHub GraphQL API, PostgreSQL*)

### Vena Solutions

Software Developer Intern

Toronto, ON

Sep. 2016 — Dec. 2016

- >> Optimized SQL queries in a REST API by solving an n+1 query problem instance, fetching lazily loaded object members before object serialization, **decreasing mean response time by 99% (~1m to <1s)** for the endpoint  
(*Java, MySQL, Hibernate*)
- >> **Placed second in pair test-case writing competition** involving all developers at the company (~60 people), judged by the quality and quantity of test cases written  
(*Java, JUnit, Selenium*)

## Projects & Open Source

### Emerald Language

[github.com/emerald-lang](https://github.com/emerald-lang)

Sep. 2016 — Present

- >> Co-designed and implemented a whitespace-delimited HTML5 templating engine with support for **variable scoping, interpolation, iteration, and conditional logic**  
(*C++ & Boost, Ruby*)
- >> Implemented a minimum viable product and proof of concept in Ruby as a gem

### petermcburney.com

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

Feb. 2016 — Apr. 2016

- >> Built my father's artwork and photography website by implementing a CRUD Ruby on Rails application for him to manage his business  
(*Ruby on Rails, PostgreSQL, Heroku*)

## Advocacy & Representation

### Vice President Academic

Waterloo Engineering Society

Sep. 2016 — Present

- >> Student representative on ~10 university committees with the primary responsibilities of acting as a liaison and **advocating on behalf of all undergraduate engineering students** for issues related to academic affairs, co-op, and professional development

 [andrewrobertmcburney@gmail.com](mailto:andrewrobertmcburney@gmail.com)

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

 [andrewrobertmcburney.com](http://andrewrobertmcburney.com)

## Programming Languages

Proficient

Ruby, C++, JavaScript (Node.js)

Experienced

Java, Scala, Python, Lua, SQL

## Frameworks & Libraries

Web Frameworks

Rails, Sinatra, Flask, Angular

Databases

PostgreSQL, MySQL, SQLite

Testing

Rspec, Mocha, Selenium, JUnit

Templating & Stylesheets

HTML5 (Slim, Pug) CSS3 (SASS)

## Technical Skills

Tools & Services

Git, Docker, Redis, Vagrant

Hosting Providers & Services

AWS, Digital Ocean, Heroku

Continuous Integration

CircleCI, Jenkins, TravisCI

## Education

Bachelor of Software Engineering

University of Waterloo

Sep. 2014 — Apr. 2019 (expected)

## Interests

Actor Concurrency Model

Artificial Intelligence

Distributed Systems

Fault-tolerant Systems

Functional Programming