

Andrew Robert McBurney

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

Workplace Experience

Software Engineering Intern

Doximity

May 2017 – Aug. 2017

San Francisco, CA | USA

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

Software Developer Intern

Vena Solutions

Sep. 2016 – Dec. 2016

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 pair test-case writing competition involving all developers at the company (~60 people), judged by the quality and quantity of test cases written

Front End Developer Intern

Coupgon

Jan. 2016 – Apr. 2016

Toronto, ON | Canada

- >> Developed a grocery store analytics application to dynamically generate store map dashboards to monitor flow of users in a grocery store, modeling user flow with bezier curves, based on data queried from a RESTful API

Leadership Experience

Vice President, Academic

Waterloo Engineering Society

Sep. 2016 – Dec. 2017

Waterloo, ON | Canada

- >> Coordinated professional development events for hundreds of engineering students such as tech talks, career fairs, résumé critiques, and interview skills workshops
- >> Advocated for undergraduate engineering students on university and faculty committees for issues related to academics, co-op, and professional development

Open Source Projects

Calder

WebGL Shader Language

Oct. 2017 – Present

github.com/calder-gl/calder

- >> Designing a library for safely constructing and integrating WebGL shaders

Conductor

Distributed Job-Scheduling System

Sep. 2017 – Dec. 2017

github.com/AndrewMcBurney/conductor

- >> A distributed job management system for registering workers, and scheduling jobs to execute on them, allowing for conditional scheduling based on job status and output

Emerald Language

HTML5 Templating Engine

Sep. 2016 – Present

github.com/emerald-lang

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

 @armcburney

 andrewrobertmcburney.com

 github.com/AndrewMcBurney

Languages

C++

Ruby

Scala

JavaScript

Python

Java

Lua

Technologies

Ruby on Rails

Node.js

PostgreSQL

MySQL

SQLite

Sinatra

Flask

HTML5 (Slim, Pug)

CSS3 (SCSS, SASS)

Interests

Distributed Systems

Concurrent Programming

Functional Programming

Computer Graphics

Language Design

Recording Music

Education

Bachelor of Software Engineering

University of Waterloo, Waterloo ON

Sep. 2014 – Apr. 2019