Andrew Robert McBurney

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Workplace Experience

Software Engineering Intern
Google

Sept. 2018 — Dec. 2018
New York, NY | USA

>> Designed and implemented a Ruby parser in Golang to parse arbitrary Ruby files and convert them into an abstract syntax tree representation.

>> Developed an unparser to transform the abstract syntax tree representation back into its corresponding equivalent Ruby source code.

Software Engineering Intern
Datadog

Jan. 2018 — Apr. 2018
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
Doximity

May 2017 — Aug. 2017
San Francisco, CA | USA

>> Created a tool to query GitHub's GraphQL API to find developers for engineering outsourcing; wrote a blog post detailing the robustness of the API and comparing the differences with their REST API.

Open Source Experience

Calder
Procedural Modeling Tool

May 2018 — Present
github.com/calder-gl

>> Co-designed and developed an API and code editor to design procedural models interactively by generating them from guiding curves.

Fastlane
Core Contributor

Feb. 2018 — Sept. 2018
github.com/fastlane

>> Helped design and implement the backend for their open source mobile-first continuous integration platform.

>> Contributed with over 50 pull requests, modified over 10,000 lines of backend code.

Conductor
Distributed Job-Scheduling System

Sept. 2017 — Dec. 2017
github.com/armcburney/conductor

>> Co-implemented a distributed job management system for registering workers and scheduling jobs to execute, allowing for conditional scheduling based on users' business logic.

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.

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Languages

Ruby
Python
TypeScript
JavaScript
Emacs Lisp
Golang
C++

Technologies

Ruby on Rails
Angular
Flask
Docker
GraphQL
PostgreSQL
MySQL
WebGL
HTML5
CSS3

Interests

Distributed Systems
Functional Programming
Computer Graphics
iOS Development
Recording Music
Blogging

Education

Bachelor of Software Engineering

University of Waterloo, Waterloo ON

Sep. 2014 — Apr. 2019