

# BENJAMIN CALDWELL

 Systems Design Engineering Undergrad

 630 Yarmouth Dr. Waterloo, ON N2K 4C2

 bcaldwell.ca

 (226) 929-2079

 benjamin.caldwell@uwaterloo.ca

 github.com/benjamincaldwell

 linkedin.com/in/caldwellbenjamin



## Skills

- **INFRASTRUCTURE:** Docker, Kubernetes, Ansible, Chef, NGINX, Linux, CI systems
- **LANGUAGES:** Ruby, Go, Javascript, HTML, CSS (Less & Sass), Python, C++, Bash, SQL
- **FRAMEWORKS:** Ruby on Rails, Backbone Marionette, Angular, Vuejs,
- **TOOLS:** Git, Arduino, Raspberry Pi



## Experience

### Shopify

#### Production Engineer

shopify.com

Jan 2017- April 2017

- Developed features and fixed bugs for a **Ruby on Rails** application that detects and monitors hundreds of services
- Responsible for designing and building a system to **track thousands of dependencies** and notify owners regarding critical updates
- Prototyped a system to **automatically update Ruby Gems**
- Extended an existing tool to run **services in Kubernetes** during development using Minikube

#### Data Application Developer

May 2016- Aug 2016

- Worked on an internal **Ruby on Rails** data visualization tool used by analysts and executives
- Improved data discovery by **improving search functionality** and implementing **data model relationship graph** diagrams
- Integrated iPython notebooks to natively display reports

### MAJiK Systems

#### Software Developer

majik.io

Sept 2015- Dec 2015

- Developed core modules for MAJiK Systems software which were **deployed to customers** to offer real-time factory production monitoring
- Developed front-end software that was used by customers using Backbone Marionette MVC framework
- Designed and implemented **front-end caching layer** to reduce overlapping API calls

#### Software Developer

Jan 2015- May 2015

- Worked primarily on **two new MAJiK modules:** Operator Input and Shift Report



## Technical Competitions

### Top 10 at Hack the North

Sept 2014

- Created an infinite AI playground game called Botscape
- Developed front-end user interface



## Personal Projects

### devctl

Open Source

- A **Go CLI** that automates developer environments using **docker containers**

### kubernetes init

Open Source

- A collection of **Ruby** scripts and **Ansible** playbooks to **automate the kubernetes cluster** setup process

### git repo mirror

Open Source

- A service written in **Go** that keeps two git repos synchronized

### Remarkr

- Built a social platform which recommends internet content based on what your friends are reading and commenting on
- Successfully **pitched** start-up project to judges at Ace the Pitch Competition, securing a start-up grant

### express socket json routes

Open Source

- Npm module, installed over **1 400 times**, that allows for the creation of **Socket.io** and **Express** routes simultaneously using a json configuration object
- Setup **Travis CI** for continuous integration

### Pebble Notify Me

- Developed a notification system that delivers time based notification to a pebble user
- Initial development was targeted to aid individuals with multiple sclerosis
- **User tested** application and modified design based on feedback

### Arduino dashboard

Open Source

- Developed web control panel for Arduino using Node and Angular, to allow for easy testing of Arduino circuits