

# NATHANIEL WOODTHORPE

Software Developer

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nwoodthorpe.com

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## Experience

### **Shopify**

**May 2016 - August 2016**

Software Developer Intern

- Learned Rails from scratch, took ownership of a Rails project used by over 5000 businesses monthly
- Generated significant revenue by converting the app from free to premium, Shopify's first premium app
- Acted as primary on-call contact for app outages and support escalations
- Decreased support escalations by 25% by meeting with support staff to identify common user issues
- Learned to appreciate command line Git, Vim and Mac

### **Freelance**

**June 2010 - June 2015**

Computer Technician

- Operated a successful computer repair business to support high-school pizza cravings
- Discovered creative methods of advertising with zero initial capital via automation
- Fine-tuned presentation and communication skills

## Projects

### **Virtual Drive Made of a Million MySQL Databases**

**August 2016**

- Created a virtual drive on an Ubuntu machine backed by a million MySQL databases
- Designed a Kernel Driver in C to orchestrate dividing data among databases and generating queries
- Used IOCTLs and Netlinks to communicate between User Space and Kernel Space
- Read/Write speeds significantly less than 1 byte / minute because MySQL isn't optimised for a million databases

### **BusStop**

**February 2016**

- Android app featured by CBC News that puts live public transic ETAs in your notification bar
- Built on top of the GRT Unofficial Live API
- Achieved a 4.7 / 5 on Google Play
- Collaborated with another dev to create an iOS port

### **GRT Unofficial Live API**

**February 2016**

- Rest API that lets developers integrate live Grand River Transit bus times into their apps
- Over 30 million API requests to date
- Obtained times by reverse engineering the official Grand River Transit app

**Find more projects on GitHub**

## Education

**University of Waterloo** Bachelor of Computer Science

**Class of 2020**

## Skills

### **Proficient**

Ruby / Rails, Java, Android, Git, Javascript, MySQL, PHP

### **Familiar**

Python, C, C# / .NET, 8086 NASM, Bash, Photoshop, Pascal, LaTeX