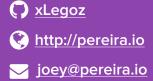
# Joey Pereira





University of Waterloo, Candidate for Honours Bachelor of Computer Science, 2013 - 2018 (Expected)

• 3.90 GPA (85% average). Ambassador for School of Computer Science.



#### Shopify, Developer Intern

January 2016 - April 2016 (Expected)

Working with Shopify Plus team, using Ruby and React, with Rails and GraphQL.

#### PiinPoint, Lead Developer

September 2014 - September 2015

- An early stage startup, previously in YCombinator, which provides a location analytics platform for franchises.
- Was solely responsible for creating the initial iOS application from scratch in Objective-C.
- Implemented creation of commute time heatmaps, which involved routing algorithms and processing a 1TB geospatial dataset of the world with C++. Turned into a scalable service with frontend visualization and interaction through D3.js.
- Rebuilt the Python backend to follow REST semantics, using MongoDB and PostgreSQL ORM models.
- Created a framework in **PhantomJS** for rendering printable PDF content.
- Was biggest contributor to PiinPoint's product and software engineering practices, and mentored new developers.
- Contributed to several open source projects used in projects, most notably SQLAlchemy.

#### Hack the North (Techyon), Organizer

February 2015 - Present

- A nonprofit organization with the ambition to create a stronger tech community in Waterloo and Canada.
- Organized Hack the North 2015, among Canada's most anticipated tech events, with over 1500 attendees.
- Worked on API endpoints serving user registration and event service infrastructure with Python and PostgreSQL.
- Built and designed first iterations of the organization website and internal tools using React.

## Projects

#### JoOS, github.com/xLegoz/JoOS

- A rudimentary operating system, as a venture into learning low level programming and hardware interfaces.
- Developed in **ASM** and **C**. Compiles to a i586 target.

#### Moocast, devpost.com/software/moocast

- Winning project for the Battle of the Hacks hackathon held by Andreessen Horowitz for \$25,000.
- Judged as best hack by industry leaders from Tilt, Airbnb, Yahoo, 21 Inc, a16z, the University of Cornell, and more.
- Live streams the screen of an Android device to a web page using **Python, Node.JS** and FFmpeg.

#### Wbot

- A bot client for a popular online video game, Runescape, developed in Java. Largely reverse engineering of bytecode.
- Featured a robust scripting API, and implemented competitor APIs for compatibility. Over 250,000 users.

#### Rustygameboy, github.com/xLegoz/rustygameboy

A work in progress Gameboy emulator, developed in Rust.

#### Compiler, github.com/xLegoz/compiler github.com/xLegoz/mips-emulator

- A compiler for a dialect of C, including pointers. Currently compiles to a MIPS target and includes a MIPS assembler.
- Designed to be highly testable and modular, with a work in progress MIPS emulator in **Rust** to validate programs.

#### TechTanks, techtanks.techretreat.ca github.com/TechRetreat/RTanque

- A programming game where you code a tanks A.I. in **Ruby** to fight other players.
- Designed as an introduction to Ruby for a highschool hackathon <u>TechRetreat</u>, which was a great success.

see more projects at http://pereira.io/projects

### **♥** Technical Skills

**Languages** Javascript (Node.js · ES5 · ES6) · Python · Ruby · Racket · Java · Objective-C

**Frameworks** React · Rails · Angular.js · Flask · Tornado · Django

**Datastores** Redis · SQL (SQLAlchemy · Alembic) · MongoDB (MongoEngine · Mongoose)