

Joey Pereira

 [xLegoZ](#)

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Education

University of Waterloo, Candidate for Honours Bachelor of Computer Science

2013 - 2018 (Expected)

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

Experience

Shopify, *Developer Intern*

January 2016 - April 2016 (Expected)

- Working with Shopify Plus team, using **Ruby** and **React**, with GraphQL, Relay, and Electron.

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, involving 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, and use model ORMs with **MongoDB** and **PostgreSQL**.
- 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**, compiling 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 a founders and 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 **TechRetreat**, 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 · Angular.js · Flask · Tornado · Django

Databases

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