

# Joey Pereira

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**I write code in** Python, Go, Ruby, Javascript, C, Java, Racket, Elixir  
**I have used** React, Flask, Rails, Tornado  
**I have made things with** PostgreSQL, MongoDB, Chef, ARMv4T  
**I am interested in** distributed systems, security and privacy, and operating systems

## Education

University of Waterloo, Candidate for Honours Bachelor of Computer Science

2013 - Apr. 2018 (Expected)

- Received Coop Student of the Year award in 2015.

## Experience

**Cockroach Labs, Software Engineering Intern**

Aug. 2017 – Dec. 2017

- Worked on [CockroachDB](#), building a tool for verifying data integrity in a distributed relational database.
- Improved official support for the SQL ORMs SQLAlchemy and ActiveRecord by adding new features, fixing database drivers for CockroachDB support, and adding the ORM test suites to the nightly CockroachDB tests.
- Created prototypes for experimental features, including a SQL query optimizer and supporting the MongoDB protocol.

**Stripe, Software Engineering Intern**

Jan. 2017 - Apr. 2017

- Launched a new closed beta product for Stripe, working with banking partners and designing the product's API spec.
- Built reconciliation processes for financial transactions, which handles millions of transactions a day.
- Established a monthly Stripe load test for resource planning and led the investigations for outages following the tests.

**Shopify, Developer Intern**

Jan. 2016 - Apr. 2016

- Built the first release of Shopify's wholesale app, providing price management and a curated shopping experience.
- Developed features for enterprise customer and large retailers, such as an Electron app for shop administration.
- Prototyped a resiliency testing framework to describe and automatically test infrastructure.

**PiinPoint, Lead Developer**

Sept. 2014 - Sept. 2015

- Built and launched the initial mobile version of the platform on iOS, targeting to release for a conference.
- Created a highly-praised travel time heatmap generator, involving routing the 1TB geospatial dataset OpenStreetMaps, saving over \$10,000/mo for the cost of the feature from competitors.
- Contributed to SQLAlchemy to add JSON support and Leaflet.js plugins for displaying vectors and text on maps.

**Hack the North, Co-Director**

Feb. 2015 - Sept. 2017

- Directed Canada's biggest hackathon, with over 1000 hackers coming from 21 countries, for two years.
- Managed a team of 35 student volunteers along with doing the hiring and succession planning.

## Projects

**HackerAPI** – ongoing

- Built software used for Hack the North such as internal dashboards for automating tasks, including travel planning for 400+ hackers, reimbursement management, and reviewing 5000+ applications.
- Tracked event data such as the number of meals an individual consumed and attendance for activities and workshops.
- Working on a roadmap to open source all of the tools built by Hack the North for use by other hackathons.

**OneApp**, [devpost.com/software/oneapp](http://devpost.com/software/oneapp)

- Created a working clone of Google Instant Apps implementation on iOS, successfully recreating the Google I/O demo.
- Awarded 3rd place winner of Battle of the Hacks v3 hackathon held by Andreessen Horowitz

**MooCast**, [devpost.com/software/mooCast](http://devpost.com/software/mooCast)

- Created an app that live streams the screen of an Android phone to a Twitch, prior to Android supporting screen capture.
- Awarded 1st place winner of Battle of the Hacks v2 hackathon held by Andreessen Horowitz for \$25,000.
- Judged as the best hack by industry leaders from Tilt, Airbnb, Yahoo, 21 Inc, a16z, and the University of Cornell.

**Wbot**

- Worked on a bot client for a popular online game, Runescape, involving Java bytecode reverse engineering.
- Reached 250,000 daily users. It featured a robust scripting API with compatibility against competing APIs.