

# ROSE XU

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## TECHNICAL SKILLS

### Languages:

*Proficient:*

Java (3 years), Python (1.5 years), and JavaScript/HTML/CSS (2 years)

*Familiar:*

Scala, Ruby, C++, C, Scheme, JSP and MySQL

### Tools and Frameworks:

*Web development:*

Backbone, Flask, Spring, Play!, Rails, jQuery, Jasmine, JUnit and Selenium

*Other:* git, bash, Unix, MongoDB, Solr/Lucene

## OTHER SKILLS

Excellent teamwork and time management skills developed through participation on Waterloo's varsity ultimate frisbee team and collaboration in various group hackathon projects.

Independent, driven, and a quick learner: learned new languages and concepts by completing online courses offered by MITx and others; participated in 10+ hackathons.

## EDUCATION

**University of Waterloo** 2014 – 2019

*Computer Science and Combinatorics and Optimization* double major

Cumulative Average: 92.2%; GPA: 4.0

*Clubs and Activities:*

Varsity Ultimate Frisbee Team, Intramurals Referee

## AWARDS

Dean's Honour List (since Fall 2014)

AP Scholar (College Board) (August 2014)

Joan Atwood Trophy for Female Athlete of the Year (2013, 2014)

## INTERESTS

*Academic:* Functional Programming, Linguistics, Graph Theory

*Other:* Ultimate Frisbee, Biking

## WORK EXPERIENCE

### Undergraduate Research Assistant, UWaterloo

May 2016 – present

- Implementing SQL query rewrites in Common Lisp in the setting of ontology based data access captured by description logic

### Software Engineering Intern, Inkling (San Francisco)

Jan – Apr 2016

- Full-stack development on *Habitat*, Inkling's collaborative online authoring system, using JavaScript (ES6), Python, and Ruby
- Delivered an interactive widget prototype to work with a third party API in under half the amount of time given
- Iterated on the Inline Formatting Bar project by adding improvements, addressing bugs and writing comprehensive unit and integration test suites in Jasmine and Selenium
- Picked up Ruby on Rails and added custom logging utilities to monitor HTTP requests in 1.5 weeks

### Software Developer Intern, Loblaw Digital (Toronto)

May – Aug 2015

- Worked on full-stack, mobile-responsive web development on the Spring and Backbone framework for Loblaw's *Click and Collect* system; wrote code in Java, JSP, JavaScript, and CSS/LESS using Agile methodologies
- Pushed bug fixes and key new features to production including a search bar to the "Getting Started" flow, a complete revamp of the "Store Locator" page and a new solr core implementation for searching recipes
- Worked extensively with Google Maps API and refactored front-end and back-end code for better structure and performance

## PROJECTS [GITHUB.COM/ROSEXU]

### The Resistance (In Progress)

- Real-time mobile multiplayer web-based game that allows users to play the board game "The Resistance" online
- Built REST API in Scala using the Play! framework with WebSocket to support real-time updates, AngularJS, and MongoDB for data storage as well as pub/sub system

### SlangLang

- A Chrome extension that shows the user the definition of any word (slang and proper English) the user highlights in the Chrome browser. Download it here: <https://goo.gl/p14GWZ>

### Latex My Notes

- Built back-end for an mobile and web application that allows users to upload a picture of printed notes from their iPhone and automatically converts the text to a customizable latex format which is served as a PDF on our web application
- Integrated open-source OCR technology Tesseract to lift text off of images; Used Python with Flask framework and MongoDB to build REST API and manage files