# Jonny Li

Software Engineer / University of Toronto Computer Science and Linguistics / myself@jonny.li

#### Education

#### **University of Toronto**

**Expected Graduation Jun 2021** 

Honours Bachelor of Science, Computer Science and Linguistics.

## **Employment**

#### SDE Intern - Amazon @ VirtualLocation

Jun 2020 - Sep 2020

- Participated in 12 week internship on Amazon Core Search, Client Services Engineering team.
- Developed Search Engine Configuration Dependency Analyzer, a dev tool to analyze search engine config metadata.
- Utilized Amazon internal package building systems and development environments.
- Participated in weekly team meetings and utilized tools like **Kanban** to communicate progress with team.

#### Software Intern - Mitsucari @ Tokyo, Japan

Sep 2018 - Aug 2019

- Assisted in development of mitsucari, a startup web service to analyze compatibility of current/prospect employees within a company using personality tests.
- Implemented front and back end components with Ruby on Rails, PostgreSQL, jQuery, Bootstrap, SASS.
- Wrote **design documents** for features such as site-wide messaging system and implemented front/back end components.

### **Projects**

#### Search Engine Configuration Dependency Analyzer @ SDE Intern, Amazon

Jun 2020 - Sep 2020

- Created an internal **Python** tool to return the dependency chain of any given search engine configuration metadata object.
- Implemented **DFS with memoization techniques** on dense dependency graph of 20,000+ metadata objects and millions of dependency relations.
- Conducted manual analysis on metadata to determine relevant dependencies of each object.
- Devised efficient methods to store large program output as JSON objects in Amazon S3.
- Contributed to ongoing effort to clean up unused configuration metadata with analysis results from tool.

**jp-bot** Apr 2016 – Dec 2019

- Created and developed a Discord chat bot written in **Python** and deployed on **Heroku**, for Japanese language learning.
- Implemented web scrapers for online dictionaries using HTML parsing libraries such as Ixml.
- Implemented server moderation features to keep track of punished/banned users utilizing MongoDB.
- Created a website to display server statistics using data from MongoDB and front/back end in PHP/JavaScript.

#### uoft-scheduler @ Hack the North 2016

Sep 2016

- Created a scheduling dashboard web app for University of Toronto students at Hack the North 2016.
- Designed and implemented front end interface with **Bootstrap** and **jQuery**.
- Implemented back end with node.js using data from Google Maps API and web-scraped data from UofT website.

#### **Activities**

#### Foreign Exchange - University of Tokyo @ Tokyo, Japan

Sep 2018 - Aug 2019

- Participated in University-wide Student Exchange Program (USTEP) at University of Tokyo for one year.

#### Webmaster - University of Toronto Japan Association @ University of Toronto

Oct 2016 - Aug 2018

- Utilized Wordpress, JavaScript to manage website.
- Organized culture festivals and language exchanges to promote exchange between Japanese and Canadian students.

#### Workshops Lead - Neurotech UofT @ University of Toronto

Sep 2017 - Apr 2018

- Created beginner-oriented tutorial workshops such as intro to programming (Python) and version control (Git).

## Languages and Technologies

Python JavaScript Ruby on Rails PHP Java C# Full Stack Web Development SQL