

# IVAN WONG

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## TECHNICAL SKILLS

Java / Python / C / C++  
HTML / CSS / JavaScript  
RESTful API

Pandas / PySpark / NumPy / Hadoop  
NoSQL / MySQL  
Windows / MacOS / Linux

Ruby on Rails / ReactJS / NodeJS / Redux  
Mobile Development / React-Native  
Git / GitHub / BitBucket / JIRA

## WORK EXPERIENCE

### Quality Assurance Automation Engineer Co-op

September 2016 – April 2017

Absolute Software Corporation - Vancouver, B.C

- Practiced **Agile** and **Scrum** in 2 week sprints with 10 other developers
- Created, debugged and ran automation test scripts in **Java**, **Selenium** and **TestNG** for functional and regression testing
- Optimized various Java web traffic data scraping tool using hash map resulting in 1 hour decrease in the fetching process
- Designed, executed and analyzed performance testing scripts using **JMeter** and **LocustIO** to detect performance bottlenecks
- Improved problem solving, debugging skills and **OOP** principles by working on their large code base, fixing its bugs and improving their exception handling for future debugging

## COMPETITIONS AND PROJECTS

 [github.com/icwong](https://github.com/icwong)

### Cryptocurrency Neural Networks Prediction Trading App – React Native + Redux

January 2017 – Present

- Developing a native application using React Native that incorporates **deep learning neural networks** to predict future cryptocurrency value based on historical trends in the pricing and trading volume
- Scraping live feed data from various websites for prices and volatility by parsing their web pages
- Improved exception handling and debugging skills by overcoming external factors that intercept trading

### Text Recognition Flashcard Maker App – Java

December 2017 - Present

- Developing a native **Android** app that detects and extracts the user's handwriting using **TensorFlow** to create flashcards

### Machine Learning Weather Forecast Prediction – Python

September 2017 – December 2017

- Structured and cleaned quantitative weather data for data classification analysis to predict the weather forecast from an image using machine learning pipelines. Techniques: Naïve Bayes, Nearest Neighbors, Support Vector Machines and Decision Trees.
- Implemented **Python's Pandas, NumPy and Matplotlib** libraries to conduct data exploration and data visualization
- Involved data loading into the **Hadoop** Distributed File system to compute models, resulting in a ~3x data processing speed
- Extracted the image pixel colors: Red, Yellow and Blue, using Python Sci-kit image to train the model

### Facebook Hacker Cup 2017 (facebook.com/hackercup)

January 2017

- Annual worldwide programming competition hosted by Facebook
- Developed problem solving skills through completing their programming puzzle

### COOPR&S (cooprs.herokuapp.com) – Ruby on Rails

May 2016 – August 2016

- Developed a **Ruby on Rails** web application with three other classmates, that allow students to share their co-op experience and for companies to promote their co-op opportunities
- Architected the model-view-controller to respond to user inputs and perform interactions on data model objects

### Various Web and Game Projects – Ruby on Rails + Python

January 2015 – August 2016

- Full stack development to create a SFU Fantasy Sports Club website using Ruby on Rails and MySQL
- Created a Python game that allows the user to move on a x by y grid to collect points, while avoiding trap holes

## EDUCATION

**Simon Fraser University** - Burnaby, B.C  
Bachelor of Science in Computer Science

September 2013 – December 2018 (Expected)