# **IVAN WONG**

https://icwong.github.io · (778) 863 - 8728 · icwong@sfu.ca · Burnaby, B.C, Canada

#### 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

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 Matpotlib 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

September 2013 – December 2018 (Expected)