

# NATALIE NGAN

4<sup>th</sup> Year, Computer Science



nataliengan.github.io



github.com/nataliengan



linkedin.com/in/natalie-ngan

+16047227812

natalie.ngan.hy@gmail.com

## EDUCATION

### University of British Columbia

#### Bachelor of Computer Science (BCS) Expected 2020

Current GPA of 4.06 /4.33

#### Bachelor of Arts,

Psychology and Family Studies  
May 2014

UBC President's Entrance  
Scholarship, 2009 –  
awarded for academic  
excellence (94.5%)

## SKILLS

### Languages:

Java  
Python  
SQL  
C/C++

### Web Development:

JavaScript  
Node.js  
HTML/CSS  
React.js  
Redux  
Jasmine Framework  
Webpack

### Software/Tools:

Android Studio  
Google Cloud Spanner  
Unix  
Adobe Photoshop

## NON-TECHNICAL WORK

### Fido Solutions

May 2012 – Feb 2017

Keyholder/Wireless Sales Rep.

## WORK EXPERIENCE

### Software Engineering Intern, Google

May 2019 – Aug 2019

Java, JUnit, SQL, Cloud Spanner

- Designed and developed advanced campaign budget monitoring and forecasting features, responsible for millions of dollars of budget being managed and thousands of transactions daily
- Implemented budget alerting/controls to fine tune spending and reduce susceptibility to spikes in abuse/virality, critical for the business need and confidence in the platform of at least 5 early access partners
- Successfully redesigned and migrated an existing database schema with an average query load of 300 queries/second without any service or development interruptions

### Software Engineering Intern, Google

Oct 2018 – Jan 2019

Java, Android Development, Espresso, JUnit

- Delivered an Android sample app that integrates with the SDK for a Google API, serving as boilerplate code and integration guide for third-party developers
- Developed a local caching system that syncs client app data with server, used by at least 5 external publishers to reduce unnecessary calls to service
- Completed >10 bug fixes and features for the SDK in a 7-10-person team, including developing custom Proguard rules to downsize the SDK and external partner apps
- Introduced semantic versioning and SDK release process to step-through before each release

### Agile Developer Intern, SAP

Sep 2017 – Apr 2018

JavaScript (ES6), SAPUI5, React/Redux, Jasmine Framework, Webpack

- Successfully delivered 3 high-priority features for data visualization tools of SAP Analytics Cloud as the main developer of the features, one of which was major request of 9 customers
- Created regression automation that covers over 3000 lines of code using Jasmine
- Received an internal SAP Appreciate Award for going the extra mile to deliver a feature

### Software Developer Intern, Fortify Communications

July – Sep 2017

Java, Android Development, Swift, Node.js, LoopBack.io, Realm, Retrofit, MixPanel

- Project owner and lead developer for Socionics Live!, responsible for initial app design, development, and training new developers for the project
- Built the app infrastructure to manage local database and handle API calls to the server, including user login, profile retrieval, and posting test results
- Developed system of usage logging and statistics in production Android and iOS apps

### Teaching Assistant, University of British Columbia

July – Aug 2017

C, Assembly

- Provided tutoring to help students understand course materials during labs, office hours, and on the online discussion board
- Assisted the professor in marking assignments and exams, and invigilating exams

## TECHNICAL PROJECTS

### RentMe, a Property Rental Predictor

Python, Scrapy, Scikit-learn, Flask

- Created a Python web crawler using Scrapy that parses and converts raw descriptions of over 10,000 Craigslist postings to quantifiable data in CSV file format
- Used Scikit-learn to train a Linear Regression model on property data to predict rental price
- Built a REST API using Flask that exposes a GET method to return predicted rental price based on property parameters

### QuickList

JavaScript, Mocha, Chai

- JavaScript library for creating arrays with amortized constant time for removing and adding elements at the front of the array
- Implemented behavior-driven testing using Mocha Framework & Chai
- Published on NPM: [www.npmjs.com/package/quicklist](http://www.npmjs.com/package/quicklist)