NATALIE NGAN

4th Year, Computer Science

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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 – Current
Java, JUnit, SQL, Cloud Spanner
- Designing and developing advanced campaign budget monitoring and forecasting features, responsible for millions of dollars of budget being managed and thousands of transactions daily
- Implementing budget alerting/controls that allows publishers to fine tune their spending and reduce their susceptibility to spikes in abuse/virality, critical for the business need and confidence in the platform of at least 2 external publishers
- Successfully redesigned and migrated an existing data 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 bugfixes 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**