

SHIRLEY YANG

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EDUCATION

University of British Columbia

BSc. Computer Science (Co-op)

GPA: 86.7%, Dean's List (2018 – Present)

Sept 2018 – May 2023 (Expected Grad)

Vancouver, Canada

SKILLS

Programming Languages: Java, Python, PHP, JavaScript, Perl, C, C++

Tools & Technologies: Bash, Linux/Unix systems, Git, MySQL, SQLite, JUnit, jQuery, HTML/CSS, JSON, XML, YAML, Node.js, React

EXPERIENCE

Ericsson

Jan 2020 – Aug 2020

5G/LTE Software Tools Developer Intern

Ottawa, Canada

- Built software tools to facilitate, visualize, and enhance the quality and development of next generation 5G/LTE telecommunications systems in a fast-paced research and development environment
- Reduced thread memory usage by ~500% by developing robust PHP tool that identifies processes with high overhead
- Collaborated with product designers to develop dynamic web-based data visualization interface that displays test execution time/stack-heap usage of developer commits using PHP, JavaScript (jQuery), JSON, HTML/CSS
- Adopted new technologies and data visualization tools, such as Elastic, to improve the performance of webpages
- Developed Python tool that sends detailed reports to QA engineers when test metrics exceed certain thresholds
- Reduced overall query time of MySQL DB (200+ tables, 10M+ rows) by ~20% by performing query optimizations
- Designed Perl tools to track Gerrit commits and their associated 5G/LTE hardware and software product logs
- Employed continuous integration and testing by configuring Jenkins jobs to run tests and maintenance scripts daily

Code the Change Foundation

Sept 2019 – Mar 2020

Developer (DDATap)

Vancouver, Canada

- Collaborated with team in an Agile environment using the Kanban framework to create an accessible developmental learning iOS mobile app for the Developmental Disabilities Association
- Deployed audio recording feature using Swift in Xcode, handling recording permissions, storage, and state issues
- Ensured backwards compatibility with older iOS and performed frequent code reviews to maintain code quality
- Utilized TapWithUs iOS SDK / APIs to integrate wearable keyboard technology functionality with app

SELECTED PROJECTS

ChainMail

Feb 2020 – Mar 2020

- Collaborated with teammates on a smart and secure mailbox hardware hack connecting users to real-time package data. Won the Wolfram Award at uOttHack 2020.
- Employed Node.js and Express on the backend, creating REST APIs to retrieve/update/delete package data
- Configured MongoDB Atlas to store user data and package details and deployed project to Heroku
- Assisted configuration of Raspberry Pi to act as a barcode scanner/camera, weight sensor, and servo motor for the box

Task Manager

Jan 2019 – Apr 2019

- Designed robust Java application functioning as a versatile task manager. Implemented composite, observer, and iterator design patterns
- Developed unique parsers and iterators for each portion of the project, storing all task data as JSON objects
- Maintained test-driven development environment by unit/black-box testing with JUnit for 100% code coverage

COMMUNITY

- **Project Tech Conferences, Head of Outreach (Feb 2020 – Present):** Leading team of 12 to organize tech education and outreach events for students—particularly those in communities that are historically underrepresented in the tech industry
- **Rewriting the Code, Fellow (Jun 2020 – Present):** Selected to be one of several women participating in a year-long fellowship empowering women in tech