

Carol Ng

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Engineering Physics senior -- seeking full-time opportunities starting May 2019

EDUCATION

B. A.Sc. Engineering Physics (Co-op) @ University of British Columbia (UBC), Vancouver

September 2014 – May 2019 (expected graduation), GPA: 3.20

Leadership: Physics Teaching Assistant, Peer Assisted Study Session Leader, UBC UAS Marketing Coordinator

Coursework: Advanced Algorithms and Data Structures (C++), Software Construction (Java), Microcomputers (VHDL, Assembly), Linear Algebra (MATLAB), Systems and Control, Computer Communications*, Engineering Capstone Project II*, Operating Systems* *to be taken in 2019

EXPERIENCE

Intern, Firefox Sync/Firefox Accounts @ Mozilla Toronto, May – August 2018

- Developed a Kotlin wrapper for the Firefox Accounts (FxA) Rust library, published as an Android component
- Refactored FxA authentication system in Notes by Firefox on Android to consume the FxA Android component in a Java 6 native module from a React Native-based app
- Fixed a reader mode bug on Firefox iOS (Swift) and fixed Firefox Desktop bugs using CSS and Javascript

Agile Developer Intern, Jam Extensions and Platform @ SAP Labs Vancouver, May – December 2017

- Integrated internal load balancing system using HAProxy with existing release workflow, enabling true zero downtime deployments without increasing workload required by Operations and Devops teams
- Developed internal chat bot instance using ES6 and Coffeescript to manage JIRA and GitHub workflows
- Automated full dependency audits to increase awareness of open source vulnerabilities and legal compliance
- Extended Capistrano tasks to trigger automated tests via chat bot and log diagnostics on OpenSUSE Linux
- Added customer-facing features to Jam API and mobile apps using Ruby on Rails ActiveRecord and SQL

Web Team Project Coordinator @ UBC Learning Commons, September 2016 – March 2017

- Increased click-through rate of the website by piloting the first user experience research (UX) sessions, garnering actionable feedback from 30+ students to inform new design and content strategy

Software Developer Intern @ Shoptline HK, January – April 2016

- Designed first automated integration test suite with PhantomJS/Selenium, saving CS team >30 hours/week
- Made store themes with CSS/Javascript, and fixed backend bugs with Ruby on Rails/AngularJS/MongoDB
- Improved content and usability of the company homepage in accordance with Google SEO guidelines

PROJECTS

Pulsar Gating – Canadian Hydrogen Intensity Mapping Experiment (C++, Python, Tempo)

- Developed C++ software module to gate on pulsar intensities using timing information derived from Tempo
- Verified results and analyzed statistical significance using Python notebooks

Casual Conversation Analysis (Python, Natural Language Processing Toolkit (NLTK))

- Trained a chatbot to mimic my online manner of speech using machine learning and Markov chain algorithms; using Python NLTK to perform sentiment analysis and encourage positive exchanges

(Anti)Social Media Extensions (Javascript, Chrome Developer Tools)

- Hides chats on Facebook Messenger and filters news feed content based on names, subjects, and sentiments