

# Connie Ma

## SKILLS

Electrical & Hardware	Languages & Frameworks	Other Tools
<ul style="list-style-type: none"><li>Breadboard circuit assembly</li><li>RC/LRC circuit analysis</li><li>Altera Cyclone II FPGA</li><li>PCB assembly via reflow soldering</li><li>RS232</li></ul>	<ul style="list-style-type: none"><li>Javascript, ReactJS</li><li>C, C++</li><li>Python, Ruby, Rails</li><li>Scala, Akka and Spray.io</li><li>Java, Android API</li><li>SQL</li></ul>	<ul style="list-style-type: none"><li>Amazon Web Services CLI and Tools (EBS, EC2, S3, Route53, RDS, Kinesis, Lambda)</li><li>Agile methodology</li><li>Git, Subversion, JIRA, CI servers</li><li>Broadcom WICED Wi-Fi framework</li></ul>

## ACADEMIC PROGRAM

**University of British Columbia, Vancouver, BC**

Bachelor of Applied Science in Computer Engineering (Software Option)

Anticipated Date of Graduation: May 2018

## CO-OP WORK EXPERIENCE

**Neurio Technology Inc., Vancouver, BC**

**MAY 2015 – SEP 2016**

Full Stack API / Web Development

- Implemented backend release features for Neurio's REST API. Wrote endpoints for user energy forecast data, device commissioning, user and location settings, appliance data, and other features
- Wrote scalable database migrations to the Neurio production SQL server
- Developed and maintained core web features such as historic graphs, energy consumption forecast calculations, in-app notifications, and other smaller features for Neurio's web application
- Redesigned and implemented the Neurio API documentation website in Ruby / Ruby-on-Rails
- Troubleshooted a production backend problem that was unrelated to API / Web and communicated with AWS support to debug memory leak issues; ultimately increased performance of the calculation by 60%

Test Development

- Designed, deployed and maintained an end-to-end QA environment that paralleled the production environment
- Wrote test scripts for the Neurio solar savings feature, consumption forecast features, and API unit tests
- Planned and designed regression test plans for a complex retroactive data analytics (ML) infrastructure component, including organized smoke tests, A/B test cases, and pairwise test cases

**Qooway Rewards Inc., Richmond, BC**

**MAY 2014 – AUG 2014**

Junior Android Developer

- Developed two major release features: a photo gallery and a user "check-in" protocol for Qooway's consumer app
- Designed and implemented a REST API client test program that could run iterations of API calls to a server database; making use of this client decreased predicted downtime of the server by 10%

## OTHER TECHNICAL EXPERIENCE

**doofieBot @ Hack the North 2017, University of Waterloo**

**15-17 SEP 2017**

- Implemented and deployed an interactive Slack chatbot that intelligently recognizes and recommends local businesses based on images supplied by a user. Also designed an algorithm to curate the set of results returned
- Adapted and used various APIs and tools, including IBM Watson's Visual Recognition, Slack SDK, and Yelp Fusion

**UBC Thunderbots Team, UBC**

**SEP 2014 – MAY 2015**

- Wrote scripts and tested implemented plays and tactics based on the Thunderbots robot software
- Participated in the development of a particle filter feature to determine location of the ball for robot orientation, using Monte Carlo density estimation algorithms

## ACTIVITIES AND INTERESTS

- Software and hardware security (achieved highest course mark of 100% in CPEN 442 Computer Security)
- Cross-country running, NBA, traveling, RTS / MOBA games, and learning foreign languages