

# Michael Kuang

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## EDUCATION

### Bachelor of Computer Science, Co-op Option

2015 – 2020

Carleton University, Ottawa, Ontario

- 4<sup>th</sup> Year Undergraduate, 11.33/12 CGPA, A
  - Dean's Honor List 2015-2018
  - Dean's Summer Research Internship for Carleton's Human Oriented Research in Usable Security
  - Entrance Scholarship
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## HIGHLIGHTS OF QUALIFICATIONS

### Technical Skills

- Exceptional ability to implement, test, and document a variety of software systems developed through 3 years of academic and workplace experiences.
- Proficient in the use of Java/Python/C++/C/Golang; developed a Cassandra test driver tool in Java, implemented color enhancement feature for Carbonite switchers in C++, a C program that provides a chat utility between two users on separate hosts, an automated performance monitor in Go, and an image classifier using Tensorflow in Python.
- Familiar with mobile development in iOS and Android. Developed an android lock screen using a novel security scheme called GesturePin for my Dean's summer research internship at CHORUS, and a binary, decimal and hexadecimal converter on iOS using Swift.
- Familiar with HTML/CSS/Javascript; used MongoDB and Node.js to implement a recipe management website.

### Communication Skills

- Excellent communication skills developed through multiple project presentations
  - Easily builds rapport with team members and co-workers to effectively collaborate as a team
  - Excellent organization skills and time management abilities, always meets deadline in advance for assignments and projects
  - Fluent in Mandarin; able to communicate orally
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## **WORK EXPERIENCE**

### **Co-op Student Internship**

**May 2018 - August 2018**

National Research Council Canada | Digital Technologies

- Wrote Python code to preprocess mammogram images, retrain a calcification and mass classifier, and cross validate the model
- Improved baseline accuracy from 87% to 93% after fine-tuning hyperparameters and applying data augmentation
- Documented code to maintain code knowledge
- Participated in the student symposium to present results of fine-tuned CNNs on mammogram images
- Skills and Technologies: Python, Tensorflow, Gitlab

### **Teaching Assistant**

**January 2018 - April 2018**

Carleton University | School: Computer Science

- Marked COMP1406 and COMP1006 assignments and exams to specification
- Assisted students with assignments and clarified computer science concepts
- Supervised students during exams

### **Software Developer Internship**

**September 2017 – December 2017**

Ciena | Blue Planet

- Built a software stress test tool in Java to improve robustness
- Designed and implemented an automated performance monitor in Golang that captures system metrics and generates performance reports for new builds
- Created test suites in order to assess product functionality and performance
- Skills and Technologies: Java, Golang, BitBucket, JIRA, Confluence, Postman, REST

### **Software Developer Internship**

**May 2017 – August 2017**

Ross Video Ltd.

- Developed application prototypes and participated in daily meetings
- Wrote code to specification to build a color enhancement feature for Carbonite switchers in C++
- Discovered and fixed bugs in Carbonite switchers
- Skills and Technologies: C++, SVN, Bugzilla

### **Research Assistant at CHORUS**

**May 2016 – August 2016**

Carleton University, Ottawa, Ontario

- Proposed a novel security scheme for mobile devices that incorporates traditional PIN passwords and gestures
- Designed and implemented the security scheme on Android Studio to test its usability and security
- Tested the application with volunteers and analyzed the data collected from the logs
- Used Java, Android Studio