

# Andrew Jemin Choi

🇨🇦 Canadian Citizen 🇺🇸 USA Permanent Resident  
☎ 213-536-1436 | ✉ aj.choi@mail.utoronto.ca | 📱 andrewjeminchoi | 🌐 ajchoi

## Education

---

### University of Toronto

MASTER (MSc) IN COMPUTER SCIENCE (IN PROGRESS)

Spring 2021 (Expected)

BACHELOR (BASC) IN COMPUTER ENGINEERING WITH HONOURS

Spring 2019

## Work Experience

---

### Google

Remote (Sunnyvale, CA)

SOFTWARE ENGINEERING INTERN

Summer 2020

- Working on the Google Cloud Networking team to develop a backend API to aggregate networking data in Go

### Amazon Web Services (AWS)

Seattle, WA

SOFTWARE DEVELOPMENT ENGINEER INTERN

Summers 2018, 2019

- Worked on the DynamoDB team to develop an internal Java client library to monitor and replace unhealthy hosts for table indexing requests (**Summer 2019**)
- Integrated tool with a distributed job scheduler to automatically trigger stale host checks and output logs
- Worked on the AWS Internet of Things (IoT) team to create Python tools to streamline the on-boarding process for devices, reducing user wait times by 60% (**Summer 2018**)
- Implemented an Android App in Java that was used as a reference model for customers to show how to authenticate and authorize devices on to AWS IoT

### Safran

Peterborough, ON

SOFTWARE ENGINEERING INTERN

Summer 2016

- Developed a Python program to parse and verify aviation requirements, reducing human errors by ~50%
- Reviewed software architecture diagrams and wrote documentation for avionic code written in C and Assembly

## Research and Teaching

---

### University of Toronto

Toronto, ON

RESEARCH STUDENT, BLOCKCHAIN LAB

Fall 2019 - Present

- Researching novel methods to accelerate storage performance in Blockchain systems, supervised by Prof. Fan Long
- Developed performance benchmarks and traces for Ethereum clients to evaluate the effectiveness of a run-time smart contract validation tool (*Published in PLDI 2020*)

### University of Toronto

Toronto, ON

TEACHING ASSISTANT

Fall 2016 - Present

- Managed four groups of students to build a large graphical mapping software in C++ and taught students about various software development tools such as git, gdb, unit testing, and profiling (ECE297 - Communication and Design)
- Designed new assignments and automated testers in C++ and Rust to teach students about object-oriented programming, concurrency, and databases (ECE326 - Programming Languages)
- Received "Outstanding" TA ratings from course surveys, with an average rating of 6.87/7

### University of California, Los Angeles (UCLA)

Los Angeles, CA

RESEARCH STUDENT, STARAI LAB

Summer 2017

- Explored topics in artificial intelligence and researched ways to perform faster inference on Bayesian Networks
- Developed a tool written in Python and C that was 8 times faster than existing algorithms in finding marginal probabilities by compiling feed-forward arithmetic circuits, supervised by Prof. Guy Van den Broeck