

Andrew Jemin Choi

🇨🇦 Canadian Citizen 🇺🇸 USA Permanent Resident

☎ 213-536-1436

✉ aj.choi@mail.utoronto.ca

🌐 andrewjeminchoi

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Education

University of Toronto

MASTERS (M.Sc.) IN COMPUTER SCIENCE (IN PROGRESS)

May 2021 (expected)

BACHELORS (B.A.Sc.) IN COMPUTER ENGINEERING WITH HONOURS

May 2019

Work Experience

Google

Remote (Sunnyvale, CA)

SOFTWARE ENGINEERING INTERN

Jun - Sep 2020

- Worked on the Global Networking team to develop an internal OpenConfig service in Go to aggregate and monitor routing data
- Created a client that asynchronously streams events from the service using gNMI/gRPC APIs to log abnormal network activity

Amazon Web Services (AWS)

Seattle, WA

SOFTWARE DEVELOPMENT ENGINEER INTERN

May-Aug 2018, 2019

- Worked on the DynamoDB team to develop a Java client library for RESTful APIs to monitor and replace EC2 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)

Safran

Peterborough, ON

SOFTWARE ENGINEERING INTERN

May - Aug 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

Sep 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

Sep 2016 - Present

- Managed 30 students on building a virtual conference software project in Java, and held weekly code reviews on clean architecture and principles of robust software design (CSC207 - Software Design)
- 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

Jun - Sep 2017

- Explored topics in artificial intelligence and researched ways to perform faster inference on Bayesian Networks
- Developed a C tool that finds marginal probabilities by compiling feed-forward arithmetic circuits, achieving 8-times speedup compared to naive backpropagation