

Andrew Jemin Choi

🇨🇦 Canadian & USA Dual Citizen 🏠 Boston, MA

✉ by.andrewchoi@gmail.com | 🏠 ajchoi.xyz | 📧 andrewjeminchoi | 🌐 ajchoi

Experience

Software Engineer

OnePay

May 2025 - Present

- Working at a Series B Fintech to develop a production-grade RAG LLM Bot in **Typescript (fp-ts)** and leveraging **AWS Lambda, SQS, and SNS** with **terraform** to orchestrate event-driven services for 1M+ users
- Designing evaluation frameworks to automate regression testing across model iterations to track containment rates

Tulip

Jan 2024 - Apr 2025

- Worked at a Series C startup out of the MIT Media Lab to create a low-code app builder for front-line manufacturing operations using **Typescript, React, MongoDB, and Go**
- Developed version control features and designed backend models & endpoints to retrieve diffs across production apps
- Led initiatives to improve code quality and decrease on-call load by improving existing test frameworks and performance tooling (**Cypress, Docker, Jest, K6, Grafana**)

Algorand (📄 go-algorand)

Jun 2021 - Nov 2023

- Worked on open-sourced consensus protocols, compilers, tools, and infrastructure for a Series B \$1Bn+ market cap blockchain, founded by Turing Award MIT cryptographer Silvio Micali
- Worked on the AVM (smart contract assembler) and PyTeal (high level contract language) to enable safer and better programmability for Web3 apps (**Go, Python**)
- Reduced build and integration testing times by **60%** by optimizing test code and infrastructure across multiple repos, which led to CI savings and faster test cycles (**Cucumber, Docker, CircleCI, Github Actions**)

CS Research

University of Toronto, Software Engineering & Blockchain Lab

Sep 2019 - Dec 2021

- Received the **IEEE ICBC '22 Distinguished Paper Award** for improving authenticated storage performance and benchmarking transaction execution for a new multi-layered Merkle-Patricia structure in EVM-based systems (*Master Thesis*)
- Developed performance benchmarks for Ethereum clients to evaluate Solythesis, a novel run-time smart contract validation tool (**AWS, Rust, Python, Solidity**) (*ACM PLDI '20*)
- Competed and won \$1000+ in awards at MLH hackathons including UofT, Dartmouth, CU Boulder (*devpost.com/ajchoi*)

Software Engineering Intern

Google, Amazon Web Services (AWS)

Summers 2018, 2019, 2020

- Worked on Global Networking (**Go, gRPC**), DynamoDB (**Java**), and IoT Core (**Python**)

Teaching | Adjunct Faculty

Wentworth Inst. of Tech, Boston University, University of Toronto

Sep 2016 - Sep 2024

- WIT COMP1050** - Computer Science II: Developed and delivered lectures, assignments and autograders in Java
- BU CS526** - DS & Algos: Taught data structures, complexity analysis and how to implement algorithms in Java
- Received "**Outstanding**" ratings from UofT course surveys (average: 6.87/7) and BU course surveys (4.9/5)

Education

University of Toronto

Master (MSc) in Computer Science

Dec 2021

Advisor: Fan Long

Bachelor (BASC) in Computer Engineering with Honours

May 2019