# Andrew Cheung







#### **University of Washington**

BS/MS, Computer Science (GPA: 3.83)

Aug. 2018 - Expected Dec. 2023 Seattle, WA



Java, JUnit, TypeScript, React, Node, Python, C++, gdb, git, Linux



Amazon Jun. 2022 - Present Bellevue, WA + Remote

Software Development Engineer Intern

- > Lead development of skill tree training service for Amazon associates
- > Design project infrastructure to support over 300,000+ Amazon associates
- > Implement TypeScript frontend/backend using AWS Lambda, DynamoDB, and React
- > Write and present project's design documents to stakeholders of 20 team members

## **UW Programming Languages & Software Engineering Lab**

Dec. 2021 - Present Research Assistant Seattle, WA

- > Compose compiler rewrites for Glenside, an internal representation of tensor operations
- > Explicate ILA code representing machine learning operations, allowing for formal verification
- > Import MLPerf models into Relay to facilitate experiments on compiler performance
- > Collaborate with researchers in UW, Princeton, and Harvard as a member of the 3LA research team

## Paul G. Allen School of Computer Science and Engineering

Seattle, WA

Sep. 2019 - Jun. 2022

Section Lead Teaching Assistant

- > Teach a weekly class of 25 students in introductory Java and object-oriented design principles
- > Lead weekly meetings with course faculty on teaching strategies to prepare staff for their sections
- > Create assignments for students aimed at isolating and testing specific programming constructs
- > Collaborate with a team of 20+ TAs to compose teaching resources, ensuring consistent instruction standards



## CSE 142 Grading Assistant Tool

- > Lead development of autograder in Python, which analyzes and grades ~210 homework assignments a week
- > Delegated and communicated AST queries and static analysis tasks to unfamiliar team members
- > Collect and implement weekly feedback from instructors and staff
- > Maintain code correctness and quality of testing before tool deployment

## Chip-8 Interpreter

- > Created Java interpreter for the Chip-8 assembly language, correctly executing 36 operation codes
- > Used modular design principles to maintain code organization of CPU, display, and keyboard components