# **Andrea Lin**

550 Memorial Dr Cambridge, MA 02139 andreayl@mit.edu 720-518-8993 197 S 80th St Boulder, CO 80303

#### **EDUCATION**

## **Massachusetts Institute of Technology (MIT)**

Cambridge, MA

- Candidate for Master of Engineering in Computer Science and Engineering, GPA: 5.0/5.0
- Bachelor of Science in Computer Science and Engineering, Minor: Mathematics, GPA: 4.7/5.0

February 2022

• Coursework: 6.875 Cryptography & Cryptanalysis, 18.404 Theory of Computation, 6.857 Applied Cryptography, 6.858 Computer Systems Security, 6.046 Algorithms, 18.211 Combinatorial Analysis, 18.600 Probability and Random Variables, 18.06 Linear Algebra, 18.03 Differential Equations, 6.036 Machine Learning, 6.033 Computer Systems Engineering, 6.004 Computation Structures, 6.805 Internet Policy, 14.01 Microeconomics

#### **EXPERIENCE**

## MIT 6.046 Design and Analysis of Algorithms

Cambridge, MA

Sep 2022-Present

Graduate Teaching Assistant

Jan 2022-May 2022

- Lecture in a weekly recitation section to over 20 students, and staff weekly office hours to provide tailored help to students
- Corresponded with professors and other teaching assistants to develop course notes and problem sets, and grade exams

## MIT Computer Science and Artificial Intelligence Lab (CSAIL)

Cambridge, MA

Graduate Research Assistant

June 2022-Aug 2022

- Directed a research project analyzing intersection attacks on anonymous communication systems
- Thesis supervisor: Srinivas Devadas

### MIT 6.S060 Foundations of Computer Security

Cambridge, MA

Lab Assistant

Sep 2021-Dec 2021

- Evaluated and improved Python autograder tests for labs on implementing security protocols for photo sharing systems
- Coordinated with professors to develop and grade problems that teach cryptography, including secure multiparty computation, public key encryption, and trust

#### MIT 6.840 Theory of Computation

Cambridge, MA

Grader

Sep 2021-Dec 2021

Facebook Menlo Park, CA

Software Engineer Intern

June 2021-September 2021

- Developed an integration test in Python to ensure the correctness and performance of the load balancer for internal services
- Analyzed and shared a report on the CPU and memory levels when draining traffic from a data center

Software Engineer Intern

May 2020-August 2020

• Full-stack web development on Instagram in desktop mode, using Django in Python, GraphQL, React.js, and Redux

Facebook University Engineering Intern

June 2019-August 2019

- Collaborated in a team of 3 to build a mobile app that places car parking reservations for listed driveways
- Learned iOS development in Objective-C and designed, queried, and managed a backend database

#### **MIT Figure Skating Club**

Cambridge, MA

Intercollegiate Team Captain

May 2019-May 2021

• Recruited MIT skaters for competitions and communicating with registration centers for the team

#### MIT 6.006 Introduction to Algorithms

Cambridge, MA

Tutor

Sep 2020-Dec 2020

## **MIT Media Lab, Viral Communications**

Cambridge, MA

Undergraduate Researcher

Oct 2018-May 2019

- Conducted research in decentralized peer-to-peer networks with InterPlanetary File System (IPFS)
- Proposed technical ideas for a project that investigates cultural inclusion through physical devices

Colorado Math CircleBoulder, COTeacherAug 2014-Jun 2018

• Directed after-school math competition practice for groups of 4-6 students from urban middle school and home schools

## HONORS

PyCon in Cleveland Grant Recipient	2019
O'Reilly Artificial Intelligence Conference in New York Scholarship Recipient	2019
National Center for Women in Technology (NCWIT) National Honorable Mention	2018
Society of Women Engineers Rocky Mtn. Division Freshman Scholarship Winner	2018
American Invitational Mathematics Examination (AIME) Qualifier	2015, 2017, 2018
N. American Computational Linguistics Olympiad (NACLO) Invitational Qualifier	2017
Colorado Science and Engineering Fair Computer Science 2nd Place Winner	2016

## **SKILLS**

Languages: Python, Java, Objective-C, JavaScript, OCaml, Unix, LaTeX, English (native), Chinese (native), French (basic)

**Activities:** MIT Asian Dance Team