Andrea Lin

305 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 a B.S. in Computer Science and Engineering May 2022
• GPA: 4.7/5.0

• Relevant Coursework: 6.875 Cryptography & Cryptanalysis, 18.404 Theory of Computation, 6.046 Design and Analysis of Algorithms, 6.033 Computer Systems Engineering, 6.004 Computation Structures, 6.031 Elements of Software Construction, 6.036 Machine Learning, 6.006 Introduction to Algorithms, 14.01 Microeconomics, 18.211 Combinatorial Analysis, 18.600 Probability and Random Variables, 18.06 Linear Algebra, 18.03 Differential Equations

INDUSTRY EXPERIENCE

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 on a team of three interns 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

Jane Street **New York, NY**
INSIGHT Software Engineering Program January 2020

• One of 25 undergraduates invited to a training track at Jane Street's offices to learn OCaml and build trading systems
• Implemented algorithms to simulate trading bonds, stocks, and ETFs in an Electronic Trading Competition

PhET Interactive Simulations **Boulder, CO**
Software Development Intern May 2016-August 2018

• Published a new version of Projectile Motion in HTML5 that is suitable for various levels of technological access in schools
• The JavaScript simulation has been translated into over 40 languages and has over a million uses by students worldwide
• Mentored another intern from my high school on coding a physics simulation and joining the PhET team

TEACHING EXPERIENCE

MIT 6.S060 Foundations of Computer Security **Cambridge, MA**
Lab Assistant September 2021-Present

• Evaluate and improve Python autograder tests for labs on implementing security protocols for systems like photo sharing apps
• Coordinate with professors to develop and grade problems that teach the theory of cryptography, including message authentication codes, digital signatures, public key encryption, and trust

MIT 6.840 Theory of Computation **Cambridge, MA**
Grader September 2021-Present

MIT 6.006 Introduction to Algorithms **Cambridge, MA**
Tutor Sep 2020-Dec 2020

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

Colorado Math Circle **Boulder, CO**
Teacher August 2014-June 2018

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

RESEARCH EXPERIENCE

Viral Communications, MIT Media Lab Cambridge, MA
Undergraduate Researcher October 2018-May 2019

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

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 Figure Skating Club, MIT Asian Dance Team, MIT Literary Society