# Sean Li ■ seanjli@mit.edu ∘ in seanjli1

## **Education**

## Massachusetts Institute of Technology

Aug. '21 – present

Sophomore majoring in 18 (math) and 6-3 (computer science).

Assistant in 6.1200 (math for CS), 6.1010 (fundamentals of prog), 18.218 (graduate combo), 18.701 (algebra).

### University of California, Berkeley

Jan. '20 - present

Concurrent enrollment. A+ in Math 104 (analysis), A+ in Math 250A (graduate abs. alg.).

Reference: Dr. Kenneth Ribet

# Monte Vista High School

2017 - present

Highest honors. Sole National Merit Scholar.

# **Experience**

## University of Minnesota-Duluth REU, Researcher

May '22 – Jul. '22

Researcher in combinatorics for top REU. Ten out of  $\approx$  300 applicants.

Preprints at arXiv:2208.14587 and arXiv:2212.13740. Submitted for publication. One more in preparation.

Reference: Prof. Joe Gallian

## University of Virginia REU, Researcher

Jun. '21 - Jul. '21

Conducted research on Tamagawa products over number fields. Fifteen out of  $\approx 700$  applicants.

Preprint at arXiv:2108.13625 (Tam. Products for Ell. Curves Over Num. Fields). Submitted for publication.

Reference: Dr. Ken Ono

#### MIT PRIMES-USA. Researcher

Jan. '20 – present

The Penney's Game with Group Action, preprint at arXiv:2009.06080, published in Ann. Comb.

Reference: Dr. Tanya Khovanova

#### **HMMT November Problem Czar**

2021 – present

Recruited to lead problem selection committee at Harvard-MIT Math Tournament.

#### Youth EUCLID Association

2015 - present

President of 501(c)(3) for free STEM classes & contests. Raised \$25k & negotiated with Board of Education.

# Selected awards and camps

Math Olympiad ProgramJune '18, '19, '20Putnam 2021, N1 (11th place)Feb. 2022Davidson Fellows ScholarshipAugust 2021Summer Program on Applied Rationality & CognitionJuly '19, '20Regeneron STS National ScholarJanuary 2021

Shing-Tung Yau Mathematics Award Semifinalist October 2020

Canada/USA Mathcamp July 2018

#### Skills

**Languages**: Python, Java, Typescript, C++, HTML/CSS, LATEX **Frameworks**: Flask, React.js, Bootstrap, Django, Sage, VimLATEX

**Tools**: Google Sheets/Excel, Blender, Vim **Operating Systems**: macOS, Linux/Unix