# Milan Lustig

Student Researcher

in Milan Lustig
green726
Milan Lustig

#### Experience

## Stony Brook University COMPAS Lab

May 2024 - Present

Simons Fellow

https://compas.cs.stonybrook.edu/

2024 Stony Brook University Simons Research Fellow working in Professor Mike Ferdman's Computer Architecture At Stony Brook (COMPAS) lab; collaborated with IBM researchers on creation of computer hardware and software to reduce AI energy usage; continuing work on project incorporating graduate students

## University of Michigan Future of Programming Lab

February 2022 - Present

Lab Member

http://fplab.mplse.org/

First high school lab member under Professor Cyrus Omar; developed computer science education software used in multiple university courses; collaborated with graduate students on PhD-thesis projects

#### New York University Martiniani Lab

August 2023 - Sep 2024

Lab Member

https://martinianilab.org/

Developed computational physics algorithm; studied graduate-level theoretical physics with Professor Stefano Martiniani; built software for use in multiple physics research labs

#### Lemelson-MIT InvenTeam

May 2023 - Present

Team President & Founder

Cold Spring Harbor High School

https://lemelson.mit.edu/teams/cold-spring-harbor-juniorsenior-inventeam

Founded \$7,500 grant-winning InvenTeam dedicated to solving local problem of tick overpopulation; presented at Town of Huntington board meetings and MIT; collaborated with Suffolk County government; won Microsoft Make What's Next Grant (\$50,000)

#### Education

Yale University

2025 - 2029

Electrical Engineering and Computer Science

Bachelor of Science

**September 2021 - June 2025** 

## **Cold Spring Harbor High School**

https://www.csh.k12.ny.us/

14 AP classes; scored 5 on every AP exam; 1590 SAT; 4.0UW, 4.29W GPA; Co-captain of FRC robotics club; 1st trombone in wind ensemble, symphony orchestra, honor band, jazz band; founder & president of engineering club; captain of men's varsity swimming; Harvard junior book award recipient

### Volunteering

## **Cold Spring Harbor High School**

2021 - Present

Cold Spring Harbor High School Music Department, Science Research, Robotics Club: organized elementary school outreach events; helped coordinate school music events; performed trombone for charity events

Foster Their Future Oct 2024 - Present

https://fostertheirfuture.org/our-new-team/

Cold Spring Harbor, NY

Volunteer tutor for local charity Foster Their Future; tutored foster children; helped to improve math, science, ELA skills

EngIn Jan 2023 - Aug 2024

Tutor

Tutor

https://www.enginprogram.org/

Volunteer "Buddy" with EngIn, a Ukrainian charity; tutored Ukrainian student in English weekly

## Regeneron STS Top 300 Scholar

Jan 2025

Society for Science

2025 Regeneron Science Talent Search Top 300 Scholar; one of 300 students nationally chosen out of 2400+ applicants (the most in competition history) for solo project "A Configurable Compiled Programming Language With Integrated Transpilation".

ISEF 3rd Place Grand Award May 2024

Society for Science

https://www.societyforscience.org/press-release/regeneron-isef-2024-full-awards/

Winner of the 2024 International Science and Engineering Fair 3rd Place Grand Award in the Systems Software category for solo project "A Configurable Compiled Programming Language With Integrated Transpilation"; competed against 1700 international finalists in Los Angeles

# Lemelson-MIT InvenTeams Grant

October 2023

Lemelson-MIT

https://lemelson.mit.edu/inventeams

Founder & president of first ever \$7500 grant-winning Cold Spring Harbor InvenTeam dedicated to solving tick overpopulation on Long Island

Simons Fellowship May 2024

Stony Brook University

https://www.stonybrook.edu/simons/

Selected as 2024 Stony Brook University Simons Research Fellow; one of <50 students selected nationally out of 1300+ applicants (<4% acceptance rate)

## National Merit Scholarship Finalist

March 2025

**NMSC** 

https://www.nationalmerit.org/s/1758/start.aspx?gid=2&pgid=61

2025 finalist in the National Merit Scholarship Competition; finalists represent the top 0.5% of students in the United States

# Congressional App Challenge Winner

Jan 2024

United States Congress

https://www.congressionalappchallenge.us/

Winner of 2023/2024 Congressional App Challenge for district NY01; led development of app to solve local water quality issues; built app capable of providing Long Island residents with real time analyses of the water quality in their local harbors and bays

2nd Place March 2025

New York State Science and Engineering Fair

2nd Place Grand Award for project "MLISA: An ISA and End-To-End Compiler for Machine Learning Acceleration" in collaboration with Stony Brook COMPAS Lab

## Ellison Institute of Technology Scholars Semi-Finalist

Oct 2024

Ellison Institute of Technology Oxford

Semi-finalist for EIT Oxford Scholar; one of <100 semi-finalists internationally

# **Publications**

#### A Configurable Compiled Language With Integrated Transpilation

December 2023

**SSRN** 

Solo paper published in pre-print journal SSRN; accepted for publication in peer-reviewed journal; project entailed multiple years of self-teaching and research work to develop a novel type of programming language