

# Ezra Erives

781-860-2612 — [erives@mit.edu](mailto:erives@mit.edu) — [eje24.github.io](https://eje24.github.io)

## Education

### Massachusetts Institute of Technology

2020 – Present

*Bachelor of Science in Mathematics and in Computer Science (GPA 5.0/5.0)*

*Cambridge, MA*

- Selected Past Coursework: Algorithms, Machine Learning, Fundamentals of Programming, Theory of Computation, Abstract Algebra, Differential Forms, Natural Language Processing (G), Statistics, Convex Optimization, Software Construction, Embedded Systems, Functional Analysis

## Technical Skills

**Languages:** Python (PyTorch, Django, ...), Java, C/C++, HTML/CSS, JavaScript/TypeScript, PostgreSQL

**Technologies:** Linux/Bash, Git, Docker

## Experience

### Genesis Therapeutics |

May 2022 – August 2022

*Research Engineering Intern*

*Burlingame, CA*

- Worked on infrastructure for and efficient computation of energetically favorable ligand conformations for use in protein-ligand docking.

### FindOurView |

February 2021 – December 2021

*Software Engineering Intern*

*Remote*

- Implemented BERT-based grammatical correction mechanism to improve quality of downstream results in pipeline
- Enhanced platform's graph visualization capability using Typescript, Javascript, and the vis.js library.
- Implemented unit test coverage and reporting for Django backend and frontend using Python and Selenium.

### MIT PRIMES

January 2018 – May 2020

*Researcher*

- [2019 - 2020] Studied mixed strategy equilibria for the winner-takes-all variant of the Colonel Blotto resource-allocation game, under mentorship of Dr. Zarathustra Brady. Was named **2020 Regeneron STS Scholar**.
- [2018 - 2019] Studied bounds for visibility in discrete axis-aligned grid-worlds in  $d > 2$  number of dimensions. **Preprint available on arXiv [here](#).**

## Projects

### style | $\LaTeX$ , $T_E X$ |

Spring 2021

- $\LaTeX$  style file for typesetting problem sets.
- Out of the box support for a variety of problem and theorem-like environments, headers, multi-problem set compilation, and code-linting.

### Constellation | Javascript, React, vis.js, CSS, HTML, mongoDB |

January 2021

- Created with Nicole Wong and Benjamin Wu at MIT's 6.148 web.lab web programming class and competition.
- Allows users to interact with a directed graph representation of the MIT course catalog.

## Leadership

### Harvard-MIT Mathematics Tournament (HMMT)

September 2020 – Present

*Officer*

- As an officer, helped to lead HMMT's Education initiative and oversee staff in running this educational component of the tournament.
- As a staff member, helped to organize talks and panels for participating high school students.

### Lexington Math Tournament

June 2019 – May 2020

*Tournament Director*

- Oversaw coordination of event logistics, problem-writing, and sponsorships.

## Awards

American Invitational Mathematics Examination (AIME) Qualifier

2016 - 2020

Regeneron STS Scholar

January 2020

Joint Mathematics Meetings, Outstanding Poster Presentation Award

January 2019