Ezra Erives

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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 1, Theory of Differential Forms, Natural Language Processing (G), Statistics, Convex Optimization
- Current Coursework: Software Construction, Embedded Systems, Functional Analysis

Technical Skills

Languages: Python (PyTorch, Django, NumPy, pandas, Matplotlib, CVXPY), Java, C/C++, HTML/CSS, JavaScript/TypeScript, PostgreSQL
Technologies: Linux/Bash, Git, Docker

Experience

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, TeX* | �   **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**