Marcus Gozon

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Education

University of Michigan | 3.92/4.0 — Ann Arbor, MI

Bachelor of Science, Computer Science — *Aug. 2021 – April 2025*

Bachelor of Science, Honors Mathematics — *Aug. 2021 – April 2025*

- **Relevant Coursework**: Honors Math I and II (Advanced Calculus and Linear Algebra), Honors Differential Equations, Honors Multivariable & Vector Calculus, Intro to Combinatorics, Intro to Modeling Political Processes, Honors Analysis I, Data Structures and Algorithms, Foundations of CS (Theory of Computation), Honors Physics I
- **Activities and Societies**: UM's Competitive Programming Team
- **Main Technical Skills**: C++, Java, Unity, C#, Python, NumPy
- **Other Technical Skills**: Git, JavaScript, React, Firebase, Mathematica, HTML, CSS

Experience

Undergraduate Researcher — Oct 2022 – present

University of Michigan — *Ann Arbor, MI*

- Developing predictive algorithms on federated tensorflow framework and comparing performance of privacy aware inference models to standard inference models in the context of medical AI

Computer Science Team Captain — Oct 2020 – May 2021

Pioneer High School — *Ann Arbor, MI*

- Taught other students Data Structures and Algorithms common throughout CS competitions every other week
- Created many resources including guides and problem sets for members
- Received the Ray Pittman Award for contributions to the coding team

Math Club Founder and President — Sep 2020 – May 2021

Pioneer High School — *Ann Arbor, MI*

- Taught other students advanced mathematics common throughout math competitions every week
- Created many resources including guides and problem sets for members
- Received the Mary Strand Danforth Award for contributions to mathematics at Pioneer

Projects

Maze Generator | *Unity, C#*

- Developed a mobile game that generates its own mazes by using a randomized minimum spanning tree
- Generated collectibles randomly within the maze and designed a shop to increase user engagement

Image Resizer | *C++*

- Implemented a content-aware image resizer by using dynamic programming

Galaxy Escape | *Java, Greenfoot*

- Created a planet-based platformer by implementing object positioning, the camera view, zooming, collision, and planetary gravity

Infinite Maze | *Unity, C#*

- Prototyped a non-euclidean maze based off of a prefix tree as a novel environment for future games

Color Board | *Unity, C#*

- Invented a board game with scoring based on adjacent edges and edge streaks by utilizing a disjoint set

Awards

William Lowell Putnam Mathematical Competition Top 500 — *Ann Arbor, MI* | February 2022

- Placed 352th on a challenging proof-based math test given to undergraduate students in the nation

Alice Webber Glover Math Scholarship — *Ann Arbor, MI* | May 2021

- Received from UM's math department for impressive achievement in mathematics

USA Computing Olympiad Platinum Division — *Ann Arbor, MI* | April 2021

- Competed in algorithmic contests to reach Platinum Division, which is composed of the top 350 pre-college students

Michigan Mathematics Prize Competition Bronze Medal — *Ann Arbor, MI* | March 2020

- Ranked 43rd overall from over 4000 students on a two part math examination