

# Joseph Hughes

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[LinkedIn](#)

[GitHub](#)

[Portfolio Website](#)

## Personal Projects

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### Automated Twitter Account - Creator

- Leveraged **Python** in conjunction with the **Twitter API** to establish and manage an automated Twitter account.
- Daily dissemination of weather updates and enthusiastic game-day wishes to sports teams.
- No longer active due to Twitter API change. Github [here](#).

### Skills At a Glance:

Python  
Twitter API  
Weather API

### AI Snake - Creator

- Developed an AI agent proficient in playing the classic game of Snake, harnessing the power of **Python** and **PyTorch**.
- Successfully applied Q-Learning techniques, achieving an impressive high score of 94 within a limited span of 2,000 trials
- Github link [here](#)

### Skills At A Glance:

Python  
PyTorch

### Calculus Ninja Game - Co-Creator

- Designed and crafted an interactive video game leveraging **Javascript** and **p5.js**
- Engineered a comprehensive game engine featuring collision detection, dynamic enemy tracking mechanics, and interactive controls
- Github link [here](#)

### Skills At A Glance:

Javascript  
p5.js

## Leadership Experience

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### MSU AR/VR Club - President and Founder

- Founded to promote education and development of emerging XR technology.
- Initiated hands-on projects and workshops and fostered a community for applying classroom knowledge.
- Organized weekly meetings and bi-weekly events to allow members to develop their skills.

**East Lansing, MI**

*Aug. 2023-Current*

### MSU Undergraduate Learning Assistant - Data Structures and Algorithms

- Hosted help room for a class of 100+ undergraduate students
- Developed data structure and algorithm-related application problems with corresponding solutions and test cases
- Assisted in grading projects, providing constructive feedback to help students improve their problem-solving and coding skills.

**East Lansing, MI**

*Dec. 2023-Current*

## Education

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### Michigan State University

*Bachelor of Science in Computer Science, Minor in Mathematics*

**East Lansing, MI**

*August 2022 - May 2025*

- GPA: 4.0, Dean's List
- Relevant Coursework: Discrete Structures(4.0), Data Structures and Algorithms(4.0), Computer Organizations and Architecture(4.0), Honors Linear Algebra(4.0)

### Technical Skills:

Python(3yrs), C++(2yrs), Git, Dart(1yr), Flutter(1yr), SQLite, Javascript(1yr), Android Studio, Java(1yr), LaTeX, Blender