Joseph Hughes

591 N Shaw Ln | East Lansing, MI 48825
joseph04hughes@gmail.com | (734) 301-0052
LinkedIn
GitHub
Portfolio Website

Personal Projects

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.
- Can be found at @SpartyStatue, Github here.

Skills At a Glance:
Python
Twitter API
Weather API

Spotify Location-Based Recommendations - Co-Creator
- Developed a location-based music upload feature, enabling users to associate music with specific geographical locations.
- Engineered a recommendation system that suggests songs and playlists based on proximity to user-uploaded content.
- Utilized **Python** and **Streamlit** to architect an intuitive user interface.
- Executed **SQLite** database queries tailored to user location data, enhancing the app's personalized music recommendations.
- GitHub link here.

Skills At A Glance:
Python
Streamlit
SQLite

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 advanced collision detection and dynamic enemy tracking mechanics
- Github link here

Skills At A Glance:
Javascript
p5.js

Education

Michigan State University   **East Lansing, MI**
Bachelor of Science in Computer Science   *August 2022 - May 2025*
- GPA: 4.0, Dean's List
- Relevant Coursework: Discrete Structures(4.0), Data Structures and Algorithms(curr.), Computer Organizations and Architecture(curr.), Honors Linear Algebra(curr.)

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

Leadership Experience

MSU Hack Weekly - President and Founder   **East Lansing, MI**
- Founded Hack Weekly to promote practical learning for Computer Science students.   *Aug. 2023-Current*
- Initiated hands-on projects and workshops and fostered a community for applying classroom knowledge.
- Organized weekly meetings and bi-weekly events to give members opportunities to develop their skills.