

MATT SCHWENNESEN

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📍 Houghton, MI

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RESEARCH EXPERIENCE

Locality Sensitive Hashing of Polygons

Research Experiences for Undergraduates – Marquette University

📅 May 2022 – August 2022

📍 Milwaukee, WI

- Researched uses of locality sensitive hashing for approximate nearest neighbor searches over polygons
- Implemented a multi-threaded C++ system to perform geometric approximate nearest neighbor searches

Asymmetric Traveling Salesperson Approximation

Google Summer of Code – NetworkX

📅 May 2021 – August 2021

📍 Remote

- Worked with NetworkX to implement approximate asymmetric traveling salesperson algorithm
- Learned how to manage GitHub within a large open source project
- Perform critical analysis of relevant graph theory and computer science research papers

PROJECT EXPERIENCE

NetworkX Core Developer

Open Source Graph Analysis Library

📅 October 2021 – Present

📍 Remote

- Contribute to issues, pull requests and discussions to merge new features and bug fixes into the library
- Manage and maintain uniform API standards and functionality in the library

TEACHING & MENTORING EXPERIENCE

College of Computing Lab Instructor

CS 1121 - Introduction to Programming I

📅 January 2023 – Present

📍 Houghton, MI

- Answer student questions during labs
- Grade and assess students on lab and course material.

College of Computing Teaching Assistant

CS 3411 – Systems Programming

📅 September 2022 – Present

📍 Houghton, MI

- Host office hours to answer student questions about class material
- Maintain grades and grade book for a class of approximately 100 students.

College of Computing Learning Center Coach

📅 January 2021 – December 2022

📍 Houghton, MI

- Assist struggling students in understanding and completing assignments
- Enhance student understanding of foundational computer science principles

EDUCATION

Michigan Technological University

BS of Computer Science

📅 December 2022

- Minor in Mathematical Sciences
- GPA: 4.0

SKILLS



AWARDS

- Dean's List, 7 semesters
- Certificate of Merit, Combinatorics & Graph Theory
- Certificate of Merit, Optimization & Graph Algorithms
- Certificate of Merit, Statistical Programming & Analysis

CO-CURRICULAR

Huskies Pep Band

Tenor Saxophone

📅 August 2019 – Present

Provide music at home sports and local events

LEADERSHIP

10r Section Leader

Huskies Pep Band

📅 May 2022 – Present

INTERESTS

- Hiking
- Skiing
- Dungeons & Dragons