# **MATT SCHWENNESEN**

### **University of Wisconsin - Madison**

Madison, WI

@ mjschwenne@gmail.com

@ schwennesen@wisc.edu

% schwennesen.org

🕠 github.com/mjschwenne

## 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**

## Department of Computer Sciences Head Teaching Assistant

#### CS 400 - Programming III

🛗 January 2024 - Current

Madison, WI

### Department of Computer Sciences Teaching Assistant

#### CS 400 - Programming III

August 2023 - December 2023

Madison, WI

### College of Computing Lab Instructor

#### CS 1121 - Introduction to Programming I

🛗 January 2023 - May 2022

#### College of Computing Teaching Assistant

#### CS 3411 - Systems Programming

## September 2022 - May 2022

**♀** Houghton, MI

### College of Computing Learning Center Coach

January 2021 - December 2022

♥ Houghton, MI

## **EDUCATION**

### University of Wisconsin – Madison

#### Ph.D. of Computer Science

August 2023 - Current

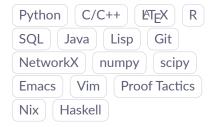
GPA: 3.625

Michigan Technological University

#### **BS of Computer Science**

- Minor in Mathematical Sciences
- GPA: 4.0

## **SKILLS**



## **AWARDS**

- Dean's List, 7 semesters
- Certificates of Merit in:
  - Combinatorics & Graph Theory
  - Optimization & Graph Algorithms
  - Statistical Programming
  - Regression Analysis
  - Predictive Modeling

## **CO-CURRICULAR**

#### Huskies Pep Band

#### **Tenor Saxophone**

## August 2019 - May 2023

## **LEADERSHIP**

# 10r Section Leader

#### **Huskies Pep Band**

May 2022 - May 2023