

# Jacob M. Ziff

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## EDUCATION

### University of Michigan

Ann Arbor, Michigan

Major: Bachelor of Science in Engineering in Computer Science

May 2025

Minors: Digital Studies, Statistics

GPA: 3.94/4.00

Relevant Coursework: Human-Centered Software Design and Development, Introduction to Artificial Intelligence, Programming Languages, Programming Paradigms, Data Structures and Algorithms

## WORK EXPERIENCE

### Future of Programming Lab

Ann Arbor, Michigan

Researcher

May 2024 – August 2024

- Contributed to expansion of exercise features in the educational Hazel interface to increase usability
- Collaborated with other students through weekly meetings to enhance codebase understanding

### KUKA Robotics

Clinton Township, Michigan

Software Design Intern

May 2023 – August 2023

- Utilized virtual commissioning software environments to test manufacturing PLC code for safety
- Developed a tool to organize, query, and create testing notes with a standardized field format regarding projects, increasing productivity for 30+ employees across multiple departments

### Michigan Language Assessment

Remote

Clerk

May 2022 – August 2022

- Managed and expanded Salesforce database of 500+ institutions to facilitate contact for clients
- Applied research skills to discover potential clients via events and databases

## PROJECTS

### Pong Neural Network

July 2024

- Architected a neural network with the Pygame and Pytorch libraries to learn the game Pong and track improvements through accuracy metrics

### Chat App

July 2024

- Developed a web messaging application employing React and a Firebase database which updates in real time with global channels and direct messages

### Weather App

June 2024

- Designed and created a web application utilizing React and APIs to display live weather data with global current and future forecasts, as well as a dynamically styled interface

### Sorting Algorithm Simulator

June 2024

- Implemented several sorting algorithms and displayed them using the SFML library with customizable array sizes and performance data

## SKILLS

Programming Languages: C++, Python, HTML, CSS, Java, JavaScript, OCaml

Frameworks and Libraries: React, Tailwind CSS, SFML, Pygame, NumPy, Matplotlib, Axios

Tools: Git, GitHub, Visual Studio Code

Certifications: Microsoft Access, Excel, Outlook, PowerPoint, and Word Associate

## ACTIVITIES

Tau Beta Pi – The Engineering Honor Society, Historian/Member

December 2023 – Present

Phi Sigma Pi National Honor Fraternity, Member

February 2022 – Present

The Michigan Football Analytics Society, Member

September 2022 – Present