**William Zheng**

[willizhe@umich.edu](mailto:willizhe@umich.edu) • 248-648-0651 • 2222 Fuller Ct, Ann Arbor, MI, 48105

**OBJECTIVE**

**Third year undergraduate seeking internship or research experience related to computer science, software engineering, or software technology.**

**EDUCATION**

**University of Michigan** **Ann Arbor, MI**

*Major: Computer Science-College of Engineering May 2025*

GPA: 3.67 / 4.00

Awards: University Honors 2022, William. J Branstrom Freshman Prize (awarded to top 5% of freshmen class/Fall 2021)

Coursework: Data Structures and Algorithms, Introduction to Statistics and Data Analysis, Programming and Introductory Data Structures, Discrete Math, Calculus I & II, Linear Algebra

**SKILLS**

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

*Software: Linux, MS, Microsoft office suites, pip, Python Virtual Environments*

*IDE: XCode, Visual Studio Code*

*Python Libraries: NumPy Pandas, Matplotlib, Pytorch, Open AI Gymnasium, Selenium, tkinter*

**PROJECT/CLASS EXPERIENCE**

**EECS 445** Introduction to Machine Learning **Ann Arbor, MI**

*August 2023 – December 2023*

* Build and train a variety of machine learning models for a specific task, such as fitting Support Vector Machines to rate movies based on user reviews.
* Trained Convolution Neural Networks to classify landmarks, based on augmented data and transferred learning.

**Personal Projects Bloomfield Hills, MI**

*2019 - Present*

* **Computer Vision**: Developed a neural network utilizing the MNIST database to recognize handwritten digits using gradient decent and back propagation in Python, [see link](https://github.com/NovaBro/MNIST-Neural-Network).
* **Computer Graphics**: Projected a rotating 3D parallelogram onto a 2D plane in 3D space, Python, and Matplotlib, [see link](https://github.com/NovaBro/Linear_Algebra_Projection_Demo).
* **Web Automation**: Used Selenium to automatically register a user for Lifetime Fitness yoga class reservations.
* **Web Scraping**: Scraped the League of Legends wiki using Selenium to acquire champion statistics.
* Link to my GitHub Repository: <https://github.com/NovaBro?tab=repositories>

**ACTIVITIES**

**Ann Arbor, MI**

*Wolverine Soft Club Member 2022 - 2023*

* Developed an Atari Space Shooter video game replica using Unity.
* Collaborated with club members in a Game Jam competition to develop a game in 2 days. The event is hosted twice a semester.

**Ann Arbor, MI**

*MDST Club Member 2023 – 2023*

* Investigated on how Reinforcement Learning models work and how to incorporate human feedback.

**Ann Arbor, MI**

*Hackathons (MHacks) 2023 – 2023*

* Collaborated with others to design and implement a website to classify food items and to return recipe recommendations.

**WORK EXPERIENCE**

**Saladworks West Bloomfield, MI**

*Crew Member July 2022 – Aug 2022*

* Maintained high standards of customer service during high-volume, fast-paced operations.
* Assisted management with inventory control and stock ordering.
* Handled currency and credit transactions quickly and accurately.

Hobbies: Working Out, Rock Climbing, Video Games, Origami