# Erika Sy

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### **EDUCATION**

University of Wisconsin, Madison

Sep. 2024 - Expected May 2026

Bachelor of Science, Computer Science

Coursework - Introduction to Artificial Intelligence, Introduction to Computer Engineering

University of Illinois, Chicago

Aug. 2022 - May 2024

Bachelor of Science, Computer Science

Coursework - Software Design, Machine Organization, Data Structures, Programming Practicum, Discrete Math, Calc 3, Stats 1, Physics 1

### **SKILLS**

Languages: C++, C, Python, Java, JavaScript, HTML, CSS, R

Frameworks & Libraries: MediaPipe, Unreal Engine, Pandas, React

Tools: Git, SimRobot, Codesys, Miniconda, Pycharm, SolidWorks, Postman, PowerBi, Figma

### **EXPERIENCE**

### **Undergraduate Research Assistant**

Sep. 2024 - Present

University of Wisconsin, Madison

- Engaged in a RoboCup project focusing on advancing autonomous humanoid robots through cutting-edge motion and decision-making technologies.
- Contributing to robotic motion analysis using SimRobot to significantly enhance robot walking speed and agility in competitive scenarios.

### **Augmented Reality Development Extern**

Sep. 2024 - Present

Snap Inc.

- Set to develop and test 4 AR projects in Snap's Lens Studio, utilizing 2D/3D assets and design principles to create immersive digital stories.
- Collaborate with industry experts to explore AR technology storytelling techniques and present interactive brand stores to diverse audiences.

### Business Technology Solutions Intern - AbbVie

May 2024 - Aug. 2024

University of Wisconsin, Madison

- Identified and implemented automation opportunities within the ServiceNow platform to enhance efficiency and reduce operational costs.
- Led 8 employee workshops, used Spreadsheets to document 12 processes, and utilized Visio to map out 5.
- Assisted in rebranding the AI landing page, contributing to a more user-friendly interface that improves the customer experience.
- Conducted 3 batches of smoke testing using Postman and contributed to the prompt engineering library.

# Research Assistant

Feb. 2024 - May 2024

University of Illinois, Chicago

- Contributed to a project to develop a digital twin for managing nuclear waste, utilizing technologies such as Codesys and Unreal Engine.
- Discussed performance bottlenecks and optimizing simulation code to enhance TCP/IP communication for the physical crane and its digital twin,

# Seasonal Advisory Intern

May 2023 - May 2023

University of Wisconsin, Madison

- Investigated innovative technological solutions to help the firm achieve a net-zero carbon footprint by 2030.
- Leveraged PowerBi, PowerPoint, and Excel to create visually compelling presentations and reports, enhancing stakeholder engagement.
- Wireframe an app using Figma that incentivizes sustainable travel choices by rewarding employees with redeemable points for prizes.

## PERSONAL PROJECTS

## AI-Powered Support Assistant | Next.JS, JavaScript, CSS

Aug. 2024 - Aug. 2024

- Developed an AI Support Assistant using Next.js, Material-UI, and OpenAI API to enhance user interaction with real-time support.
- Integrated Error Handling, loading states, real-time messaging, auto-scrolling, and multi-language support for improved usability.
- Set up the Development Environment and Deployment Pipeline with **Node.js** and **Vercel** to ensure robust and scalable application performance.

# Digital Hand Pen Whiteboard | Python

Aug. 2023 - Apr. 2024

- Created a hand gesture recognition whiteboard using MediaPipe, OpenCV, and Pycharm, enabling intuitive interactions through gesture tracking.
- Participated in solution-oriented team discussions and mentor-led reviews to refine the application's functionality and user experience.
- Showcased the project's innovation and practical applications capabilities at a comprehensive poster session and the ERSP national conference.

### Harry Potter Sorting Hat | Python

Jul. 2022 - Aug. 2022

- Built an interactive game using Python Turtle Graphics to simulate the Sorting Hat's house selection process based on their responses to questions.
- Developed and implemented an algorithm that analyzes and weighs user responses to determine the most suitable house placement.

### **EXTRACURRICULAR**

Newsletter Chair University of Wisconsin, Madison May 2023 - May 2024

- Published 10 newsletters bi-weekly to inform WiCS Members about upcoming programs, workshops, and initiatives to increase engagement.
- Collaborated in bi-weekly meetings, bringing innovative event ideas to cultivate a sense of community.
- Provided support in orchestrating 13 WiCS events, 3 fundraisers, and 1 woman in tech week, assisting with setup and cleanup.

### Organizer SparkHacks

Sep. 2023 - Feb. 2024

- Orchestrated a student-run hackathon that had 300 participants collaborate, innovate, and compete over 24 hours and a series of 4 prompts.
- Coordinated with judges on the hackathon's objectives, criteria for evaluation, and the support needed to carry out their roles effectively.
- Co-led and managed logistics for a Mario Kart tournament with 25 participants to foster community engagement and provide a fun break.

# **AWARDS**

Ideathon

Code Your Dreams

Apr. 2023

Won the Best Community Outreach Award for a search-enabled calendar that displays STEM events to help engage underrepresented groups.