Erika Sy



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EDUCATION

University of Wisconsin, Madison - Bachelor of Science, Computer Science

Sep. 2024 - May 2026

Coursework - Introduction to Artificial Intelligence, Introduction to Computer Engineering University of Illinois, Chicago - Bachelor of Science, Computer Science

Aug. 2022 - May 2024

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

SKILLS

 ${\bf Languages:} \ C++, \ C, \ Python, \ Java, \ JavaScript, \ HTML, \ CSS, \ \ R$

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

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

EXPERIENCE

Incoming Augmented Reality Development Extern - Snap Inc.

Sep. 2024 - Present

Aug. 2024 - Present

- Software Engineering Fellow Headstarter
 - Engineered 5+ AI applications and APIs using Next.js, OpenAI, Pinecone, and Stripe API, achieving 98% accuracy. Managed the project lifecycle
 from design to development, implementing MVC design patterns to ensure robust and scalable solutions.
 - Secured a position among 15,818 selected candidates from 41,803 applicants. Enhanced skills through coaching from Amazon, Bloomberg, and
 Capital One, focusing on Agile methodologies, CI/CD processes, Git version control, and microservice architecture.

Business Technology Solutions Intern - AbbVie

May 2024 - Aug. 2024

- Identify and implement automation opportunities within the ServiceNow platform to enhance efficiency and reduce operational costs.
- Led **8** employee workshops, utilized Spreadsheets to document **12** processes, and used Visio to map out **5** of those processes.
- 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 - University of Illinois, Chicago

Feb. 2024 - May 2024

- Contributed to a project to develop a digital twin for managing nuclear waste, utilizing technologies such as Codesys and Unreal Engine.
- Enhanced the project's efficiency by optimizing the existing simulation code and improving the real-time TCP/IP communication between the
 physical crane operations and their digital twin representation.
- Examined performance bottlenecks and executes strategic code optimizations to improve the system's efficiency and safety protocol.

Early Research Scholar - University of Illinois, Chicago

Aug. 2023 - May 2024

- Engaged in a forward-looking project to design a whiteboard application using MediaPipe, OpenCV, MiniConda, and Pycharm. The application uses hand gesture recognition via camera, allowing users to intuitively control and interact with a digital whiteboard.
- · Participated in solution-oriented team discussions and mentor-led reviews to enhance the application's functionality and user experience.
- Presented research findings and demonstrated the application's capabilities in a comprehensive poster session.

Seasonal Advisory Intern - KPMG

May 2023 - May 2023

- 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

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, Vercel, and testing to ensure robust and scalable application performance.

Space Invaders | Python

Aug. 2024 - Aug. 2024

- Developed a Space Invaders clone that utilizes **Python** and **Turtle graphics** to recreate the game with progressive difficulty levels.
- Incorporated a high scoreboard feature to track player achievements, encouraging competition and motivating continuous playability.
- Designed user interface with introductory and "you lose" screens to enhance the gaming experience.

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 - Women in Computer Science

May 2023 - May 2024

- · Crafted 10 bi-weekly newsletters 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 Participant - Code Your Dreams

Apr. 2023

- A Hack for Accessibility event with Google Chicago and Deaf Kids Code aimed at making technology more accessible and inclusive.
- Developed a wireframe for a website that features a dynamic calendar that employs web-based search functionality to automatically curate and display relevant STEM events, fostering greater engagement and opportunities for underrepresented groups.
- Awarded the Best Community Outreach Award for the application.