# Derek Yang

1770 Broadway St., Apt. #400 • Ann Arbor, MI 48105 • (810) 893-1468 • dereky@umich.edu

## EDUCATION

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

*Bachelor of Science in Engineering in Computer Science, Minor in UX Design, Minor in Business*          *May 2026*

GPA: 3.96/4.00

Awards: Dean's List (Fall 2022, Winter 2023, Fall 2023, Winter 2024), James B. Angell Scholar, XR @ Michigan 2023 Student Showcase - Best Environment, William J. Branstrom Freshman Prize

Coursework: Programming and Data Structures, Data Structures and Algorithms, Software Engineering, Extended Reality, Web Design, Web Systems, Foundations of Computer Science, Intro to Computer Organization

## EXPERIENCE

**Next Play, Daily Fantasy Sports**                                                                                    **Remote**

*Software Engineer Intern*                                                                            *May 2024 – August 2024*

- Worked on team of six to build software using agile methodologies with ClickUp, boosting team efficiency by 30%
- Developed React components in TypeScript to create user-friendly pages for drafting players
- Tested player entry through mock API tests with Postman to ensure functional player data storage
- Utilized responsive design approach with CSS media queries to create adaptable components based on screen size

**University of Michigan Robotics Department, MAVRIC Lab**                                    **Ann Arbor, MI**

*Research Assistant*                                                                                *May 2023 – August 2023*

- Researched human-robot interaction in context of augmented reality and shared mental models to develop AR collaborative task for human-robot team
- Formulated and built color-sorting task on Magic Leap 2 using eye, marker, and hand tracking APIs from Unity SDK
- Employed ROS2 system to assemble controller to automate two AR robots according to other agents' intentions
- Presented summary of past research and own research to professors through written reports and live demo

## PROJECTS

**Collaborative Lab for Advancing Work in Space, NASA SUITS Challenge**                        **Ann Arbor, MI**

*AR Team Member*                                                                                    *April 2023 – Present*

- Communicated with UX team about mini-map interface to implement design in Unity with C# scripts
- Implemented frontend for communication system among astronauts and control center using MRTK package

**MHacks 16, SHAKYS.**                                                                                    **Ann Arbor, MI**

*Project Lead*                                                                                            *November 2023*

- Supervised team of four to devise 2D action game with smart bosses able to adapt to player's habits
- Assisted with implementing neural network and engineering adaptive AI with C# scripts in Unity

**Intro to Entrepreneurial Design: AR/VR Lab, 1:AM Train**                                    **Ann Arbor, MI**

*Unity Developer*                                                                                *February 2023 – April 2023*

- Illustrated storyboard of VR game by discussing interface and user actions with three other members
- Integrated swimming and voice recording functionality in VR by coding C# scripts in Unity
- Showcased game to students, faculty members, and industry workers with presentation and live demo

## COMPUTER SKILLS

Platforms: Windows, Unix

Languages: C/C++, C#, Python, HTML, CSS, JavaScript, TypeScript, SQL, LaTeX

Tools/Frameworks: Unity, Unreal Engine, Git, React, ROS2, VSCode, Visual Studio, Blender, Figma, Excel, Word

## ACTIVITIES

Alternate Reality Initiative (XR Student Organization), *Member*                        *September 2022 – Present*

Super Smash Bros. Ultimate Esports Team, *Captain*                                        *August 2023 – Present*