

OLIVIA K. FRANKEN

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EDUCATION

University of Missouri

August 2024 - May 2027

Bachelor's of Science in Computer Science • GPA 3.92

SKILLS

Technical Skills: C, C#, Java, HTML, CSS, JavaScript, jQuery, React, Blender (Modeling & Animation), Unity Game Engine, Virtual Reality

Interpersonal Skills: Team Lead Management Experience, Conflict Resolution in Fast Paced Work Environments, Clear Communication, Attention to Detail, Time Management

PROJECTS

Undergraduate Research Fellowship in XR Semiconductor Cleanroom Simulation January 2025 - Present

- Contributed to the development of semiconductor fabrication training software in virtual reality.
- Created realistic 3D models of cleanroom equipment to achieve the look of a lab “digital twin” and assisted with interactions and implementation in the Unity Game Engine.
- Collaborated with peer researchers, graduate students, and professors across multiple departments through weekly standup meetings with regular deliverables.

Research Experience in Intelligent MR Machining Operation Software

October 2024 - Present

- Coordinated with peers to develop a mixed-reality application for the Microsoft HoloLens 2 to enhance manufacturing control. Conducted user testing where inexperienced machinists were able to use the platform to to operate and troubleshoot 3D printers and CNC machines through a holographic client.
- Scripted a custom simulator package to directly visualize GCode generated for toolpaths in the 3D space using the Unity Game Engine. Versatile and standalone, it can be added to any Unity project.

Personal Portfolio Website

July 2025

- Designed a personal website using HTML, CSS, JavaScript, and React to bring my resumé to life.

Café Point of Sale

September 2024

- Created a C#/ .NET desktop application consisting of a fully functional cash POS system.
- Users can utilize beverage modification functionalities comparable to big retail chains and benefit from additional features like automatic change, a calculator, and other intuitive visual tools.

3D Art To see modeling and animation work, please visit my portfolio website where they are listed under projects.

AWARDS AND PUBLICATIONS

“Intelligent Mixed Reality Platform for CNC Machine and 3D Printer Operation and Management” to be published in *Lecture Notes in Mechanical Engineering*, Springer.

Best Paper Award FAIM 2025 • Flexible Automation and Intelligent Manufacturing Conference

June 2025

2nd Place ASME MSEC Student Manufacturing Design Competition

June 2025

CAMPUS INVOLVEMENT

Mizzou Virtual Reality Organization (MUVR) • Communications Chair

April 2025 - Present

Mizzou Computing Association (MCA) • Member, participated in TigerHacks 2024

September 2024 - Present

St. Thomas More Newman Center Bible Study • Small Group Member

September 2024 - Present

WORK EXPERIENCE

Andy's Frozen Custard

March 2022 - July 2024

Full-Time Shift Supervisor

Osage Beach, MO

- Oversaw operations during the shift including onboarding, managing, and training associate team members, abiding by corporate policy, quality control, and providing excellent customer service.