### 860 39th st Boulder CO

# Sawyer Reinig

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#### SKILLS AND CERTIFICATIONS

- C#, C++, C, Unity
- Arduino Microcontroller
- Experience in the field of VR
- Critical thinking and problem solving
- Leadership and Communication Skills
- Presentation skills

## **EXPERIENCE**

#### BAIC LAB - Research Assistant

Feb 2022 - PRESENT

- Improved both the front and back ends of the NSF Future of Work Study. This study used AR to have participants build what they see on the AR model using PVC pipes. My job was to make sure the AR model was aligned with reality. I also created a system for sending eye tracking data to a server to be analyzed later.
- Ran my own study to evaluate the effect of driving with a distracting child using a virtual environment using Fnirs (Functional Near-Infrared Spectroscopy), a tool for examining blood oxygen levels in the brain, and an arduino with a heart rate monitor and GSR (galvanic skin response) sensor to measure participant stress.
- Ran live demonstrations in front of over 30 audience members. Greatly building my confidence in presenting.

#### **ACME LAB -** Research Assistant

October 2023 → PRESENT

- Worked with a Phd student to create a multiplayer VR experience with runtime 3D object generation using AI in a mixed reality environment.
- Helped create a MR DJ experience using Oculus Quest spatial anchors to bind the Unity scene to reality.

#### PERSONAL PROJECTS

July 2019 - PRESENT

- Created my own full fledged VR game called Hop Up. This taught me a lot about what producing a game from start to finish looks like. I created my own video trailer to entice people to download and try the game. I also learned how to use the meta quest developer hub, which allowed me to use the player username API's to create an in-game leaderboard that used Oculus usernames as the name for each leaderboard entry.
- Worked with an ATLAS masters student to create a VR spike ball game with multiplayer hitting physics. This
  taught me how to work with others to deliver a product, and the steps needed to resolve any disagreements in
  how features should be built. This also helped build my confidence in working with networking between users
  to make multiplayer interactions.

## **EDUCATION**

University of Colorado Boulder - Expected Graduation: May 2025

BA of Computer Science, Minor in ATLAS, — GPA: 3.82

#### LEADERSHIP AND ACTIVITIES

## TA for Intro to VR: CU Boulder's ATLAS Program

• Assisted students through the process of creating their own VR experiences. Ran my own lecture on how to use Unity's XR Simulator, and how to create a VR game for Oculus Quest.