

## COMPUTER SCIENCE STUDENT

### Technical Skills

**EDUCATION**  
**University of Cincinnati**  
 College of Engineering,  
 Computer Science  
 Class of 2022

- ◆ C++
- ◆ C# / Unity
- ◆ Python
- ◆ Docker
- ◆ Linux
- ◆ Gitlab CI
- ◆ Unreal Engine 4 (some)
- ◆ Bash Scripting
- ◆ Google Cloud Platform (some)
- ◆ Markdown

## SOFTWARE ENGINEERING EMPLOYMENT EXPERIENCE

**Siemens Digital Industries Software – Software Engineer (Full Stack)** May 2022 - Current

- Enable Teamcenter administrators to classify Workspace Objects using re-usable Classes, Properties, and Key-LOVs.
- Write maintainable, readable, and scalable code using Template Method Pattern in C++ and JavaScript.
- Maintained and understood Teamcenter Classification's 20+ year legacy codebase.
- Created CPPUnit (C++), Gtest (C++), JUnit (Java), Jest (JS), and Cucumber (Gherkin) tests to validate code changes.

**Northrop Grumman – Co-op + Part-time** May 2021 – May 2022

- Extended an automatic test framework using Python and Selenium.
- Wrote automatic tests for a web application using Python and Selenium.
- Created Gitlab CI pipelines for running tests against many platforms.

**Northrop Grumman – Co-op** August 2020 – Jan 2021

- Created an Android Testing pipeline using Gitlab CI.
- Created an Android debugger application in Python which reads Logcat output to detect system changes in a virtual Android device.
- Created a tool using Python, PyGame, and Git to visualize changes in a Git repository over time.

**Siemens Digital Industries Software – Co-op (Two Semesters)** August 2019 – May 2020

- Released and maintained Teamcenter Classification AI as part of a scrum team.
- Maintained and added features to several C++ files and Bash scripts.
- Created documentation for end users and developers.

**University of Cincinnati: NIST Indoor Location Project – Co-op + Part-time** August 2018 – May 2020

- Independently created a Unity project in which users navigate transparent 3D maps of buildings, with the ability to see points of interest like Fire Extinguishers through walls.
- Gathered requirements from a Civil Engineering professor, who led the project.
- Incorporated a variety of tools such as Unity Shaders, Google Cloud Datastore, and Google Cloud Storage.

## PERSONAL GAME DEVELOPMENT PROJECTS

See more projects at [sam-scherer.com](http://sam-scherer.com) and [swiimii.itch.io](http://swiimii.itch.io), or see code at [github.com/swiimii](https://github.com/swiimii)

**Dualikiwi – Unity2D project** *Steam Release Work-In-Progress* 2022 - Current

- 2D Puzzle game originally created in 48 hours for the 2022 Global Game Jam.
- The player must defeat their clone that mirrors their movements.
- Users can create their own puzzles using the included Level Editor.

**Spaceships VR – Unity3D + Oculus Quest 2 project** 2021

- VR Puzzle game created in 24 hours for the MakeUC 2021 Hackathon.
- Players pilot a fighter spacecraft, shooting lasers at enemies and dodging projectiles.
- 3rd place Hackathon winner, out of 100 projects submitted.

**Space Escape Room – Unity3D project** 2021

- Multiplayer puzzle game created in 24 hours for the RevolutionUC 2021 Hackathon.
- Players work together to repair their spaceship before they run out of oxygen.
- 3rd place Hackathon winner, out of 36 projects submitted.

## LEADERSHIP AND COMMUNITY INVOLVEMENT

**International Game Developers Association – Cincinnati Chapter Leadership Team** Spring 2024 - Current

**University of Cincinnati Board Game Club – Executive Board** 2018-2021