Charles Scott

crscott1@arizona.edu | 775.741.9914 | Tucson, Arizona

View my Projects at: charlesrscott.com

Education

Bachelor of Science in Computer Science | Bachelor of Science in Game Design and Development

University of Arizona, Tucson AZ | anticipated graduation: May 2025

GPA: 4.0 | Dean's List Honorable Mention | Academic Honors | National Merit Scholarship

Proficiencies: C, C#, Java, Python, Unity Engine.

Academic Experience

CSC 345 - Analysis of Discrete Structures | May 2022

- Demonstrated proficiency in important algorithms for computer science, including quick sort, merge sort, weighted quick union, and Djikstra's algorithm.

- Demonstrated proficiency with important data structures for computer science, including arrays, linked lists, trees, graphs, queues, stacks, and heaps.

ISTA 425 - Algorithms for Games | May 2022

- Demonstrated proficiency with common algorithms for game development and computer graphics, including AABB collision detection, Phong illumination, recursive ray-tracing, A* pathfinding, and AI agent finite state machines.

ISTA 551 - Game Development | May 2022

- Demonstrated proficiency with the Unity Game Engine and C# programming language. Coded systems in C# including movement, shooting, player upgrades, and data transfer between scenes.

- Games can be viewed at: https://zero4304.itch.io/evolution-unbound, https://zero4304.itch.io/federations-idle

Work & Extracurricular Experience

Unity Developer - Finding Lake Chewaucan | September 2023 – Present

• Worked part time on developing an educational game in Unity as part of National Science Foundation Grant Award #2228632. Designed and developed multiple systems including a quest system and UI, key rebindings using the Input System package, and a match 3 minigame.

Global Game Jam 2023 | February 2023

• Worked with three other students to create a working game over the course of the week. Personally designed and coded tutorial messages, enemy movement, and simple cutscenes.

• Our game, An Acorn's Odyssey, won best game for the Tucson site.