Samuel Hilfer

SOFTWARE ENGINEER

samuelhilfer@gmail.com | +1 (303)-362-1313





EDUCATION

University of Colorado Denver

May 2023

Bachelor of Arts in Computer Science with a Minor in Business (3.63 GPA)

Relevant Coursework: Web API, Intro to Networks, Network Programming, IOT: Sensing Communication Control, Intro to VR/AR Graduated with Honors

RELEVANT WORK EXPERIENCE

Castix LLC | World Builder and UX Developer | Denver, CO

June 2023 - Aug 2023

- Spearheaded **C#** implementation of <u>URL</u> detection functionality in **Unity** 2D client chat system
 - Utilized **TextMeshPro** components to restyle URLs and make them interactive through the addition of <u>pseudo-</u> **HTML** link wrappers
- Strengthened the **security** of in-game client chat system by implementing Regular Expression (**regex**) pattern detection for URLs
 - O Pattern detects "http/https" and "ftp" links as well as links with no scheme to block inappropriate URLs from being posted
- Conceptualized and revitalized a captivating 3D "player vs. player" Unity desert landscape map
 - Exercised full creative control while aligning the map to the limited vision, lore, and design direction requirements of stakeholders
- Worked with stakeholders to gather requirements for UX/UI design tasks

TECHNICAL SKILLS

Programming Languages: C#, C++, C, Java, HTML, CSS, PHP, python

Operating System Experience: Windows 7/10, Linux, Unix

Database Experience: MySQL, MongoDB

Platform Experience: Unity 2D/3D/VR (Meta Quest), JetBrains Suite, VS Community/Code, Vim, MonoGame

PROJECTS

CountDown

- Game Genre: 2D, Semi-Idle, Tower Defense, Casual
- **Core Loop:** Use NPCs or throw town structures to defeat waves of enemies. Continue to build your town up while defeating as many enemies as you can to achieve the highest score possible.
- **Release Status:** Demo Released; Working on 0.1 early access paid elements
- **Current Progress:** Additional game mode implemented; working on bug fixes, and new enemy art

Personal Website

- A one-page portfolio to host image and video updates on recent projects and work experience.
- Languages Used: HTML, CSS, JavaScript
- **Release Status:** Portfolio completed and hosted using github.io

15 Minutes from Jupiter

- Game Genre: 2D, Bullet-hell, Rogue-like, Platformer
- **Core Loop:** Defeat enemies to gain random attributes for your character and make it to the final boss within 15 minutes
- Release Status: Pre-Demo
- Current Progress: Implementing velocity-based movement, and advanced player movement techniques to create a combo system with the basic platforming mechanics