Jonathan Sands

https://www.jksands83.com/   716.251.2301   jksands83@gmail.com

Seeking a gameplay programming co-op utilizing strong object-oriented programming skills.
Available Immediately.

Skills:

Languages	Software/APIs	Foreign Languages
C#, C++, JavaScript, and C	Unity, DirectX11, and Autodesk Maya	Japanese and Spanish

Student Work

Immersion Breaker – Student Project   *January 2021 – May 2021*

Using Unity, developed an experimental concept game where the player controls an NPC in an RPG-style game. The player must work behind the scenes to ensure the hero's quest goes smoothly, whilst managing the hero every step of the way. Worked as lead programmer and developed major aspects of the game.

Graphics Programming – Independent Study   *January 2021 - May 2021*

Using DirectX11, explored advanced graphics programming topics such as Physically Based Rendering, particle systems, and real-time shadows.

DevRob – Student Project   *November 2019 – May 2020*

Using Unity, developed a 2D side-scrolling platformer where player abilities can be given and taken away. Worked as lead developer and implemented a robust level editor to facilitate level design.

Keyboard Warrior – Student Project   *January 2020 – February 2020*

Using Unity, developed a casual RPG where the player types on their keyboard to issue commands and defend against attacks. Managed a group of 4 and implemented UX elements as well as typing functionality.

Flashover – Student Project   *September 2019*

Developed an analog board game where 3 players collaborate using unique abilities to contain a forest fire before time runs out. Created the original concept and worked as Project Manager for a group of 5 to assign tasks and facilitate progress.

Game Jam Submissions

Tower of Tarot
Wild Magic Game Jam Submission
September 2019

In a team of 3, produced a 2D platformer in 36 hours that introduced and switched mechanics as the player progressed. Implemented collision detection, movement, and mechanic swapping mid-level.

Hang Your Hat
Global Game Jam Submission
January 2019

In a team of 5, produced a 2D action platformer with narrative elements in 48 hours. Implemented movement, collision detection, animation, and on-screen GUI elements.

Education and Experience:

Rochester Institute of Technology (RIT) – Rochester NY

Bachelor of Science, Game Design and Development. Graduated Summa Cum Laude May 2021.

School of Interactive Games and Media – Teaching Assistant - *August 2018 – May 2021*

Teaching Assistant for introductory C# and higher-level C++ classes. Responsible for grading students' work while also being available during class lab time to answer any questions; assisting students' learning processes while maintaining a friendly and helpful demeanor.

ID Tech – Online Private Instructor - *July 2020 – October 2020*

Responsible for conducting 1-on-1 online lessons for students of all ages, teaching Unity, C++, JavaScript, and 3D Printing with Autodesk Maya. Students brought a variety of skills to the lessons, so I was required to create lesson plans tailored to each individual student while also keeping the material fun and engaging.

School of Interactive Games and Media – Vulkan Graphics Programmer- *September 2020 – January 2021*

Responsible for writing abstraction for Vulkan for the purpose of updating curriculum for RIT graphics introductory courses. Tasked with learning Vulkan, testing the current Vulkan engine for functionality, and debugging/constructing additional modules for the engine as needed.