Game Developer/Computer and Software Programmer

Tech-savvy professional with proven expertise in developing cutting-edge game engines and implementing complex gameplay mechanics. Skilled in crafting realistic game dynamics through physics engines and object interaction systems. Adept at leading teams to align project goals and enhance productivity. Proficient in C++ programming, applying mathematical concepts to game development, and optimizing user experience through in-built menu systems and gameplay features. Well-versed in leveraging a strong foundation in mathematics and engineering to overcome technical challenges and drive innovation in game programming. Passionate about game creation and dedicated to delivering exceptional input in overall success of dynamic and immersive gaming experiences.

Areas of Expertise

- C & C++ Programming
- System Testing and Debugging
- C# Programming
- Project Management (Agile/Scrum)
- Vulkan API
- Graphics Programming
- Artificial Intelligence
- Gameplay Mechanics

- Team Leadership
- Game Engine Development
- Menu System Development
- Engine Architecture

Education

Bachelor of Science in Game Development - Full Sail University, Winter Park, FL | 2022 - 2024

Relevant Coursework: Systems Programming | Data Structures and Algorithms | Computer Graphics | Engine Development | Artificial Intelligence | Operating Systems | Computer Networks | Information and Database Systems | Software Engineering

- Member of Full Sail Armada, Collegiate E-Sports Team
- Salutatorian

Project Experiences

Jumpi Jumper – Orlando, FL Game Programmer 2023 - 2024

Develop and implement a robust physics engine using AABBs, OBBs, Spheres, and planes for realistic game dynamics. Engineer a versatile game object system enabling customized behaviors and interactions across various in-game objects. Utilized Jira to lead daily stand-ups and manage project workflows, ensuring team alignment and productivity.

- Acquired and applied in-depth knowledge of C++ to complex game programming challenges, enhancing game functionality and performance.
- Executed comprehensive testing and debugging of systems to maintain game performance and user experience.
- Fostered a collaborative team environment, leading to efficient project management and timely completion of game development milestones.

Star Penguin – Orlando, FL

2023

Game Programmer

Formulated and executed core gameplay mechanics and systems, including player movement, combat, and AI, to enhance user interaction and game fluidity. Developed menu systems utilizing FLECS for streamlined navigation and player engagement.

- Applied advanced mathematical concepts such as matrices, vectors, and quaternions to facilitate dynamic player and enemy movements within game scenes.
- · Leveraged Vulkan API to engineer a simplified renderer capable of positioning and orienting objects effectively in 3D space.

Technical Proficiencies

C/C++ | C# | Vulkan API | DirectX 11 API | Unreal Engine 5 | Unity 22 | HLSL Programming | Visual Studio | Jira | Github | Perforce