SAM SHERROD

PORTFOLIO   **GitHub**   **LinkedIn**   samsherrod91@gmail.com   (250) 858-5330   Victoria, BC, Canada

SKILLS

- **Technical**: C++ | C# | SQL | Basic enemy AI | VR | C | Assembly | Javascript | PhaserJS | Python | Java | HTML | CSS | NodeJS | Git | Bash | programming patterns | cloud game development | testing | optimizing code
- **Graphics**: GPU programming / HLSL | PBR | vertex and fragment shaders | materials | texture maps | lighting | VFX | animation | ray tracing | global illumination | linear algebra | vector mathematics
- **Software**: Unity | GitHub | Visual Studio/Code | Windows | Mac OS | Linux/Shell
- **Soft**: Critical thinking, communication, problem solving, teamwork, strong work ethic, initiative

RELEVANT PROJECTS

2D Group Games Project in Unity – Project Link

- Produced a GDD and a schedule of deliverables for school. Used agile practices to work in a team of 5 from pre to post-production. Setup tools and systems within Unity to support team including 2D lighting, post processing, player and enemy animations with state machines, and a Tilemap system.

3D Still Life Composition with Shaders – Project Link

- Created a 3D still life composition using Unity's Universal Render Pipeline and Shader Graph. Made custom specular and metallic materials with lit shaders and texture maps by adjusting each surface's input and output.
- Contained a custom shader with a shimmer effect by combining two separate gradient noise maps, and making their offset values change over time.

Virtual Reality Project in Unity and C# – Project Link

- Created a 3D VR bow and arrow prototype within Unity allowing users to navigate and shoot at stars. Built and deployed on Meta Quest 2. Used C# and Unity's XR Toolkit to create an XR Rig with working hand models.

C++ Audio Application Using OOP – Project Link

- Created a DJ audio application in C++ with the JUCE framework using OOP. Contained multiple classes with constructors that interacted with one another, references, pointers, and header files for each cpp file. Included two DJ decks, sliders, buttons, volume, and speed controls.

JavaScript Web Based Group Games Project – Project Link

- Created a web based 2D platformer game with pre-made assets using OOP and SOLID principles. Researched new technologies, and solely built 100% of the game portion in JavaScript, HTML, CSS, PhaserJS, and Tiled. Used agile software practices, and led a team of 5 from pre to post-production.

Front and Backend Web Application – Project Link

- Created a prototype of a dynamic web application allowing users to monitor and control devices in their smart home. Designed frontend, backend, and middleware with an API using HTML, CSS, JavaScript, NodeJS, Express, EJS templates, SQL, and MySQL. Used GET and POST HTTP methods to request and send data securely.

CERTIFCATES

- 25+ in software, Google IT Support, and Unity Pathways

RELEVANT WORK EXPERIENCE

Business Owner – Director/CFO   **Kiowa Farm** – Victoria BC, Canada   2012 – Present

- Responsible for website development, coaching, program development, operations, administration, financial management, and human resources.

EDUCATION

- **Oct 2020 – Fall 2023**   BSc. Computer Science - **University of London**, UK - **GPA (4.0)**