

Jaylon Sifuentes

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Education

MICHIGAN STATE UNIVERSITY

B.A., Games and Interactive Media Development, GPA: 3.9

East Lansing, MI

May 2026

Minor: Computer Science

Awards: Dean's List, Hispanic Scholarship Fund Scholar

Relevant Coursework: Algorithms and Data Structures, Object-Oriented Software Development, Linear Algebra, Advanced Game Development, Computer Graphics

Experience

SCARY DINNER GAMES

Lead Programmer

September 2024-Current

- Maintained code quality and team productivity by establishing code review standards and GitLab workflows for 10-developer Unity Steam release, reducing bugs and merge conflicts
- Built a scalable template-driven roguelike deck system, empowering designers, writers, and artists to create content independently- documented with class diagrams and tutorial videos to maximize cross-discipline content creation

DETROIT PUBLIC SCHOOLS

Lead Instructor

June 2024-August 2025

- Taught STEM-based lessons, including an introduction to coding, to classes of students grades 1-8
- Tailored lessons to varying comprehension levels to maximize student learning and engagement

Projects

3D Graphics Engines

Developed 3D graphics engines in C++ using Vulkan and OpenGL, implementing PBR (Cook-Torrance BRDF, IBL), core glTF 2.0 scene loading, and parallax occlusion mapping.

Ray Tracing

Implemented Photon Map global illumination in Vulkan, featuring multi-bounce indirect lighting utilizing BSDF, Russian roulette termination, octree-accelerated photon gathering, and real-time visualization with adjustable photon count and gather radius.

Voxels

Programmed a voxel octree with physics in Unity, including a GPU instancing optimization capable of over 2 million voxels per chunk with real-time destruction.

Golang Networking

Developed a Go server API enabling mobile browser-based gyroscope control for a Unity planetarium experience, implementing WebSocket communication to support low-latency multiplayer sessions with numerous players.

Extracurricular

SPARTASOFT CLUB

Participant

April 2023-Current

- Collaborated with cross-disciplinary teams to implement game features and drive project completion during game jams
- Learned to balance scope, quality, and pace across multiple short-term game projects, improving ability to estimate programming timelines and feasibility

Skills

Programming: C++, C#

Tools: Unity, Vulkan, OpenGL

Workflow: UML, GitHub, GitLab