SERIF CETINALP

Undergraduate in Computer Science

+1 (416) 705-6938
serifcetinalp@gmail.com
22 Walmer Rd
github.com/Serif-C
Toronto, Ontario
linkedin.com/in/serif-cetinalp

EDUCATION

Present **Lassonde School of Engineering - York University** **Toronto, ON, Canada**

- Bachelor of Arts in Computer Science (Expected Graduation: 2025)
- **Relevant coursework:** Advanced Object Oriented Programming, Game Development, Game Design and Prototyping, Introduction to Embedded Systems, Introduction to User Interfaces, Software Design, Fundamentals of Data Structures, Software Tools

EXPERIENCE

09/2023 – 04/2024 **Software Developer** **Twenty Ninety Creative (Game Studio)**

- Developed and optimized gameplay mechanics for **Dead Flamingo** in **Unity (C#)**, enhancing performance and player interactions.
- Participated in rapid prototyping for undisclosed projects, improving iteration time using **Unity** and **C#**.
- Engaged in **Agile Scrum** meetings to define sprint goals and improve workflow efficiency.
- Researched and implemented innovative **Game Development Techniques**, contributing to project planning and execution.

PROJECTS

01/2025 – present **Senile Sorcery – Procedural Generation & AI Pathfinding** **Click Here for More Detail**

- Engineered **procedural object generation** in Unity using C#, increasing replayability and variation in gameplay.
- Implemented **AI pathfinding** using Unity's NavMesh library to optimize AI movement and decision-making.

01/2025 – present **University Simulator – AI-Driven Task Management System** **Click Here for More Detail**

- Developing a task management and simulation system in Unity, implementing **state-driven AI logic** to dynamically adjust character behaviours based on predefined conditions and external stimuli.
- Implemented **data-driven AI balancing** utilizing **finite state machines (FSM)** and decision trees to model time management, stress levels, and resource allocation in a simulated university environment.
- Designed a **priority-based task scheduler** that autonomously ranks and executes character tasks, optimizing for efficiency and user-defined priorities.

Interactive 3D Animation Project **Click Here for More Detail**

- Developed a real-time **3D animated scene** featuring hierarchical object movement, integrating principles of computer graphics and animation.
- Demonstrated strong programming skills in **OpenGL/WebGL/GLSL,** adhering to best coding practices.
- Designed and implemented **custom shaders** to create visually distinct rendering effects.
- Applied **texture mapping techniques**, including both procedural generation and image-based mapping.
- Engineered a **360-degree camera system** using transformations (lookAt() and setMV()) for dynamic scene navigation.
- Optimized rendering performance to maintain **real-time frame rates**, ensuring smooth animation playback.

Light Chaser Game – Arduino-Based Reaction Game **Click Here for More Detail**

- Designed and developed an **Arduino-Powered reaction-based game** that challenges player's timing and reflexes through sequential LED lighting.
- Implemented **button input handling and LED sequencing logic** to create an engaging gameplay experience.
- Optimized **timing mechanisms** to control LED transition speed, ensuring fair difficulty levels.
- Overcame challenges such as **button debounce issues** and precise timing adjustments for smoother gameplay.

Endless Winter – Narrative-Driven Unity Development **Click Here for More Detail**

- Developed a short, narrative-driven Unity game using self-created environmental assets and carefully selected audio to enhance storytelling

SKILLS

Programming Languages and Frameworks: Java, HTML, CSS, JavaScript, C/C#/C++, WebGL, GLSL, Risc-V, Verilog, React, Ruby, Python
Technologies and Tools: Android Studio, Visual Studio/Code, Unity, Blender, OpenAPI, Gemini, Firebase, PlatformIO, Git