SUNIL SAPKOTA

Game & Web Developer . Gandaki, Nepal . therealsunx@gmail.com . therealsunx.github.io

Summary

A programmer with passion for solving problems with code. Decent experience in making games, game & physics engines, web apps and tools like text editors.

Skills

- Game Development (Unity, C#, C++, Python)
- Web Development (React, Nextjs, Threejs, Fiber)
- Shader (GLSL, HLSL, Graph Shader)
- Engine Development (2D and 3D physics, ECS)
- Desktop App Development (C, C++)
- 3D Modelling and Animation (Blender)
- Pixel art and Animation (Aseprite)

Projects

- <u>trvim</u> is a text editor, built in C. It is similar in operation to vim and supports features like syntax highlighting, split screen view, buffer-view based file editing, etc.
- <u>PhysX-2D</u> is a cross-platform game/physics engine library developed from scratch in C/C++, that provides window management, sprite rendering, textures & shaders loading, physics-system handle as well as inbuilt Entity Component System.
- Endless is a 3D endless arcade/adventure flight game, with dynamic environment generation providing thrilling gameplay.
- Edge-Of-Space is a 2D arcade classic, perfect for passing time with some action.

Relevant Experience

Web Developer @MarginTop Solutions since Nov 2023

- Developed interactive and responsive websites for clients using different frameworks like React, Next.js.
- Developed 2D and 3D configurator-based web products using THREE, Fiber and Konva.
- Collaboration with backend engineers, designers and project managers to develop qualitative websites.
- Gained proficiency in modern frontend development frameworks and API integration.
- Setting and maintaining Continuous Integration/Continuous Deployment (CI/CD) pipelines for products.

Software Engineering virtual experience program @Electronic Arts on June 2024

- Proposed a new feature for the Sims 4 and wrote a Feature Proposal describing to other stakeholders.
- Built a class diagram and created a header file in C++ with class definitions for each object required in the feature.
- Patched a bugfix and optimized the Sims 4 codebase by implementing an improved data structure.

Education

- Bachelor's Degree in Computer Engineering: Tribhuvan University: 2021-2025 (undergoing)
- High school: Madhyabindu Multiple Campus: 2021

Certifications

- EA software engineering virtual Job Simulation Completion Certificate
- Executive Member tenure completion in Robotics Club, WRC

^{*}Note: Check out therealsunx.github.io for more information