

Alvin Philips

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Education

Sheridan College

GAME LEVEL DESIGN (ONTARIO GRADUATE CERTIFICATE)

SEP 2024 – PRESENT

Oakville, ON

SEP 2023 – AUG 2024

Oakville, ON

GAME DEVELOPMENT - ADVANCED PROGRAMMING (ONTARIO GRADUATE CERTIFICATE)

Wilson College

BSC IN INFORMATION TECHNOLOGY

JUN 2019 – JUN 2022

Mumbai, India

Skills

Languages C++, C#, C, Rust, Python, JavaScript

Technologies Git, OpenGL, WebGPU, WebAssembly

Game Engines Unity, Unreal Engine, Godot, Custom C++ and Rust engines

Work Experience

Furlastic Duo (Group Capstone Project)

TECHNICAL DIRECTOR

JAN 2024 – SEP 2024

furlasticduo.itch.io/furlastic-duo

- Directed technical aspects of a local co-op physics-based adventure game.
- Achieved constant 140hz performance goal on target hardware by optimizing script and rendering.
- Automated build processes, reducing manual effort and accelerating testing cycles.

Major League Hacking

SOFTWARE ENGINEERING FELLOW

SEPT 2022 – DEC 2022

- Contributed to the Dappio framework, enhancing modularity for decentralized application (DApp) development.
- Led major refactoring initiatives within the Dappio framework, resulting in improved code organization, performance, and maintainability.
- Identified architectural bottlenecks, implementing key changes to optimize performance.

Projects

Game Engine (built for Ubisoft NEXT)

C++

JAN 2024 - JAN 2024

github.com/alvinphilips/next-2024

- Designed a flexible Entity-Component-System (ECS) framework for scalable game development.

RATS (Rasterize a Triangle, Silly) - Software Rasterizer

RUST

DEC 2023 - JAN 2024

github.com/alvinphilips/rats

- Created an ASCII software rasterizer with foundational graphics rendering capabilities.
- Added support for loading vertex data from external files, improving usability.

Moon Engine - Browser-Based Game Framework

RUST, WEBASSEMBLY, WebGL

JUL 2021 – JAN 2023

github.com/polarvoid/moon-engine

- Designed a batched renderer capable of rendering 10,000+ textured quads in a single draw call.
- Developed a robust 2D collision system with unit tests covering all scenarios.

Volunteering and Leadership

Sheridan Cheese Club

PRESIDENT (2023-2024)/VICE PRESIDENT (CURRENT)

OCT 2023 – PRESENT

Oakville, ON

Red Hot Chili Steppers - Terry Fox Run Team

TEAM CAPTAIN

SEP 2023 – PRESENT

Oakville, ON