# Leo Hellmig

# **Engine programmer**

#### **PROFILE**

leo.hellmig@email.com

+31 6 10588809

Breda, Netherlands

github.com/LeoHellmig ()

<u>LinkedIn</u> in

Portfolio %

Student at Breda University of Applied Sciences. **Generalist game programmer** with a focus on **engine programming**. Strong **teamwork skills**, and **flexible**. Excited to pick up tasks in team projects. Passionate about games, programming and **skilled at C++**. Open to relocation.

#### **Skills**

Hard skills: C++, Unreal engine, Github, Perforce, Large codebases

Soft skills: Problem solver, Flexible teammate

#### **PROJECTS**

### Custom Engine & Blightspire - C++

2024 - 2025

- Integrated **EnTT** as **ECS** into the engine to suit our current and future needs in the engine
- Integrated FMOD for 3D spatialized sound and dynamic audio effects
- Collaborated on and implemented a modular engine architecture
- Integrated Tracy profiler as profiling tool
- Implemented editor tools for in-engine debugging

# Coral Engine (Custom Engine) & Lichgate - C++

2024

- **Refactored model loader** to support skeletal meshes and animations.
- Developed a robust animation system for calculating and updating skeletal meshes
- Extended the DX12 and PS5 renderer to render skeletal meshes
- Extended my animation system to support **animation blending** and attaching entities to bones
- Animation API integrated in the ECS and visual scripting

# Beetle Brawl - Unreal Engine

2023

- Developed procedural menu soundtrack using Meta Sounds
- Implemented Level loading and transitioning
- Implemented functional main menu UI and responsive game UI

# Smaller projects – C++ & Unreal engine

2023-2025

- Rays' Cave: **Simple 2D game** rendered by a 2D **Raytracer** with **various optimizations** to achieve **real-time rendering**.
- Self-study in multithreaded job systems and fibers.
- 2D mathematical renderer: A library built using **CMake** which can render user-defined parametric functions and surfaces to a Pixel surface.
- Unreal engine dungeon generator plugin. UE plugin implementing a random walker algorithm.

#### **Education**

Breda University of Applied Sciences - Creative Media and Game Technologies

2022 - 2026 Breda, Netherlands