



Martijn Hagaraars

C++ Game Engine Programmer

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📍 Brabant, The Netherlands

About

I'm a **C++ programmer**, with a primary focus on **game engine development**.

I enjoy solving problems and learning about new concepts. I aim to write well-structured code that is robust, clean and reusable.

I've worked effectively in several teams, occasionally assuming lead roles to ensure good communication. I also work effectively on my own, as I've worked on many personal projects.

Skills

C++	3 years
OpenGL	2 years
Unreal Engine	4 years
GitHub	2 years
Perforce	3 years
Scrum	2 years

Languages

Dutch	Native proficiency
English	Fluent

Work Experience

On the Bubble

Student Project, Custom Engine

Windows (Steam), PS5

Sep 2023 - July 2024

Lead engine programmer

Team size: 13

A **custom game engine** with the goal of creating a monkey-ball-inspired game for **Windows and PS5**, using **raytracing**, **custom physics** and a **custom level editor**.

My contributions include **implementing the game objects** (foundation for all objects in a level), **level systems** (used for loading, unloading and switching levels), **custom serialization and deserialization** and **file IO for both platforms**.

LAGGED

Custom Engine

Windows (GitHub)

Sep 2023 - Present

Personal project

Team size: 1

LAGGED (which stands for Learning About Graphics and Game Engine Development) is a **personal project where I work on creating a general-use engine**.

This project contains an **ECS using EnTT**, editor tools like an entity editor, which uses **EnTT's Meta reflection system**, **terrain generation** using Perlin noise and **graphics using OpenGL**.

Ruckus and Rascal

Student Project, Unreal 5.1

Windows (Itch.io)

March 2023 - June 2023

Lead developer and AI programmer

Team size: 11

A chaotic couch co-op game where you play as 2 raccoons, with the goal of taking out the head chef of the Deviant's diner.

My contributions include **creating tools for customizing AI behaviors** for the enemies and developing **gameplay prototypes**. I also took on the role of **lead programmer**, contributing to Scrum processes and ensuring alignment and task clarity among all programmers.

Education

Breda University of Applied Sciences

Creative Media and Game Development

Sep 2021 - Jun 2025

At the Breda University of Applied Sciences, I'm studying the Programming discipline, which is part of the Creative Media and Game Technologies programme.

Here, I am mostly focusing on Engine development. I am currently working on a large group project where me and eleven other programmers are creating an ambitious game engine which will be used for creating a currently unannounced game.