

## SKILLS

### Coding

C C++ C# UE Blueprints Lua OpenGL DirectX

### Software

GIT SVN Perforce Unity Unreal Engine CMake Premake  
Version Control Game Engines Build Tools  
Visual Studio Rider Neovim  
IDE

## EXPERIENCE

### Professional Experience



C# Back-end Developer · Internship

Groupe SeLoger · Paris, France

December 2021 - February 2023

### University Projects

Superficia · Lead Unity Programmer

Graduation Project · 5 Team members · 5 Programmers

January 2021 - Present

#### Built With

C# · Unity · Realm

- Implemented an UI Library based on Fluent Design.
- Realm event-based systems for fast and responsive actions.
- Implemented all interactions logic using custom events and interaction system.
- Free-roaming 1st person camera in C#.
- Implemented a custom Localization library using resource files.
- Monitoring and optimization using Sentry.io
- Advanced File System manipulation using System.IO
- Inputs handler for keyboard and mouse.
- Proprietary space optimization algorithm integration.
- Shortcuts / keybinds system and settings.
- Custom release tool in C# with auto versioning and deploy to GitLab.
- Leadership over other programmers and managing project.

R-Type · Lead Programmer

Student Project · 4 Team members · 4 Programmers

August 2020 - November 2020

#### Built With

C++17 · SFML · protobuf · Boost (Asio)

- Cross-platform support for Windows, Linux and MacOS.
- Online multiplayer up to 4 players using TCP/UDP protocols.
- Implemented an Entity-Component-System based architecture.
- Multi-threaded server to handle multiple game sessions.
- Protobuf integration for client-server communication.
- Custom level file syntax, parsing and loading.
- Implemented a scene system for the game.
- Inputs handler for keyboard and controller.
- Hot-reloading of entities from DLLs.
- Animations and sound effects.
- Implemented server-side collision detection.
- Leadership over other programmers and managing project.

Bombberman · Lead Programmer

Student Project · 6 Team members · 3 Programmers

December 2019 - June 2020

#### Built With

C++17 · Irrlicht Engine · FMOD

- Cross-platform support for Windows, Linux and MacOS.
- Local multiplayer up to 4 players.
- Procedurally generated maps.
- Implemented an Entity-Component-System based architecture.
- Implemented a scene system for the game.
- Inputs handler for keyboard and controller.
- Animations and sound effects.
- Leadership over other programmers and managing project.

### Personal Projects

Igalima Engine (Work in Progress - Early Stage of the project)

Game engine written in C++ with C# scripting using hostfxr. Multiple rewrites from scratch.

January 2021 - Present

#### Built With

C++ · C# · OpenGL · DirectX

- Entity-Component-System based architecture.
- Abstracted Graphics API.
- Font rendering using MSDF.
- Physics integration with Jolt Physics
- Inputs handling for keyboard and controller.
- Editor to simplify the creation of a game. (like Unreal Engine or Unity Editor)
- Scripting with C# / .NET 6

Physics Engine

Physics engine written in C++ with OpenGL.

November 2022 - Present

#### Built With

C++ · OpenGL

#### Current Features

- Custom math library.
- SIMD optimization.

#### Planned Features

- Collisions detection.
- Simulation of rigid bodies of various shapes.
- Simulation of constraints between bodies.
- Water buoyancy calculations.

## EDUCATION



Bachelor in Computer Science

Epitech Technology · Paris, France

September 2018 - Present



Baccalaureate of Engineering Sciences

Lycée Jean-François Champollion · Lattes, France

September 2015 - July 2018