



# NIELS BRUNEKREEF

Graphics/Game programmer

## ABOUT

Hello, my name's Niels and I study at **BUAS**. I'd like to work on graphics and interesting game projects in the future.

The projects I've worked on are a mix of solo and team projects. The team projects are mostly interdisciplinary, though TeamWisp consists of programmers only. This means I already worked alongside artists, designers, programmers and producers.

My native language is **Dutch**, however I'm also fluent in **English** and I'm also learning the basics of *French*. Currently, I live near **Leiden**.

## CONTACT

### Site

<https://nielsbishere.com>

### Mail

[n@osomi.net](mailto:n@osomi.net)

## INTERESTS

When I'm not working on expanding knowledge on graphics, I like to play around with existing games; modding them, creating modding tools and reversing games.

When working on personal graphics projects, I mostly work on my Vulkan cross platform framework. Which is currently supported on Windows and Android.

## EDUCATION

### Breda University of Applied Sciences

September 2016 - present

BSc. CMGT International Game Architecture and Design

### Leo Kannercollege | GPA: 76%, Graduation Project: 100%

September 2010 - June 2016

Higher General Secondary Education

## EXPERIENCE

### Project Wisp - real-time raytracing | Graphics / optimization

October 2018 - present

A 9 student team working on real-time raytracing software. Responsible for; reflections, optimization, parenting, culling, basic deferred rendering, several fixes and structural changes.

### Voxel engine | Graphics / optimization

May 2018 - June 2018

An 18 student team working on a voxel engine for the Switch. Created an entirely GPU-based voxel particle system (basic particle simulation, rendering & spawning); to provide a tool for artists. Implemented culling and multi draw indirect to avoid draw call overhead.

### Team Moose | Gameplay / tools

November 2017 - January 2018

A 8 student team working on Mineblowers in Unreal. The game used a custom Arduino controller. Worked on the spline system which created rail spline meshes and were used for gameplay.

### Triggered studios | Gameplay

May 2017 - Jan 2018

A 12 student team working on Rail Recon in Unreal. Released game to Windows using Steam. Worked on mechanics such as energy/charging/shield and VFX implementation.

## SKILLS

**Graphics frameworks** | OpenGL, GLES, DX11, DX12, Vulkan, Qt

**Programming languages** | ARM9 assembly, C, C++, C#, Java, PHP  
JavaScript, GLSL, HLSL, CSS3, HTML5

**Tools** | GitHub/Git, Visual Studio, Trello, Jira, Pix, CMake, NSight, RenderDoc, SPIR-V, Perforce

**Engines** | Unreal Engine, Unity