

# Angelo Theodorou

**Blog:** <https://encelo.github.io>

**LinkedIn:** <http://www.linkedin.com/in/encelo>

## Work Experience

### April 2024 - To Date, Self Employed (Granada)

- Working full-time on [nCine](#), a 2D cross-platform and open source game engine

### January 2021 - March 2024, The Multiplayer Group (Remote from Granada)

**Role:** Senior Rendering Engineer

**Description:** Worked on Bethesda's Starfield as a Senior Rendering Engineer.

**Technologies:** C++, Direct3D 12, Vulkan, HLSL, GLSL

**Tools:** Visual Studio, Perforce, RenderDoc, PIX, Nsight Graphics

**Website:** <https://themultiplayergroup.com/>

### March 2019 - December 2020, Self Employed (Granada)

- Worked full-time on [nCine](#), a 2D cross-platform and open source game engine
- Developed [SpookyGhost](#), a procedural animation tool for sprites made with nCine and ImGui

### March 2017 - February 2019, Frostbite (Stockholm)

**Role:** Rendering Engineer

**Description:** I have worked in the Image Quality rendering team of the Frostbite engine. Some of my tasks have been:

- Help with the DirectX 12 RTX integration in the editor
- Add a way to capture a sequence of screenshots to test temporal effects stabilization
- Transition textured and frustum lights from deferred/stencil to tiled lighting
- Add support for newer versions of Visual Studio in the custom Enlighten build system
- Initial analysis of the integration effort to merge back Bioware's Anthem Enlighten changes

**Technologies:** C++, Direct3D, HLSL

**Tools:** Visual Studio, Perforce, RenderDoc

### June 2015 - February 2017, NaturalMotion Ltd. (Oxford)

**Role:** Android Technology Programmer

**Description:** I have worked in the Core Game Tech team on the in-house Echo engine used for games like *Dawn of Titans* and *Clumsy Ninja*. Some of my tasks have been:

- Initial porting of the engine from OpenGL to Vulkan
- Rewrite the API for atomic operations on all supported platforms
- Refactor the ARM NEON intrinsics code for vector and matrix operations with unit tests
- Help with the transition from Android Lollipop to Marshmallow

I have also worked with the CSR2 team to migrate their building process from Ant to Gradle.

**Technologies:** C++, Java, OpenGL ES, GLSL, Vulkan, Android API

**Tools:** Visual Studio, Subversion, git

## December 2012 - June 2015, ARM Ltd. (Cambridge)

**Role:** Senior Software Engineer

**Description:** I have worked in the Middleware Graphics team in Mali Ecosystem for the Media Processing Group (MPG) to help game companies achieve the best on Mali GPUs.

My role has been a combination of graphics and game programming, technical support to game middleware companies, presentations at events worldwide and real-time applications profiling and optimization:

- I have worked on Unreal Engine 4 to help porting it to ARM 64-bit
- I have written the codebase for a Unity demo revealed at Unite 2014
- I have presented sponsored sessions at GDC, Unite and Gamelab Barcelona
- I have assisted companies like Frostbite, Epic Games and Unity with the Mali tools

**Technologies:** C++, C#, Python, OpenGL ES, GLSL

**Tools:** Visual Studio, Qt Creator, CMake, git, Unity

## Jun 2010 - November 2012, SpinVector (Benevento)

**Role:** Programmer

**Description:** I have worked as a game programmer and a multi-platform GUI programmer on three released titles: *From Cheese*, *AXL: Full Boost*, and *Bang!: The Official Videogame*.

**Technologies:** C++, Qt4, Objective C, UIKit, Java, Android API

**Tools:** Visual Studio, Xcode, Qt Creator, qmake, Eclipse, Subversion, Unity

## Education

- Bachelor's Degree in Computer Science at the "Federico II" University of Naples with final mark 110/110 cum laude (highest mark with honours)