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 cross-platform 2D 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 cross-platform 2D 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: 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: 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 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: 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:

- Helped porting Unreal Engine 4 to ARM 64-bit

- Wrote the codebase for a Unity demo revealed at Unite 2014

- Presented sponsored sessions at GDC, Unite, and Gamelab Barcelona

- Assisted companies like Frostbite, Epic Games, Unity, and Gameloft with the ARM and 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: 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, University of Naples "Federico II", awarded 110/110 cum laude in 2009