



# Matteo Bertello | Graphics Programmer

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A software engineer with a strong academic background and an emphasis on performance and portability. My main focus and passions are 3D graphics and low level engine programming. Always looking for new challenges to tackle and new things to learn.

## Employment

- Feral Interactive** **London, UK**  
*Linux/macOS Graphics Engineer* *August 2016–Current*  
I work on the graphics stack used to port games from Windows/DirectX 11 to Linux/OpenGL and macOS/Metal. Some of my tasks include re-implement the needed DirectX 11 features using OpenGL 4.5 and Metal, investigate/workaround driver bugs and limitations, and profile/optimize both the engine and the shaders code to ensure optimal performance across all platforms.  
Worked on the ports of Deus Ex: Mankind Divided, Hitman, Total War: Warhammer and F1 2017.
- RTView** **Udine, IT**  
*Virtual Reality Software Engineer* *March 2014–May 2016*  
I was a Virtual Reality content developer using C++ and Unreal Engine 4, responsible for the creations of gameplay interactions, writing shaders and the development of a plugin to export 360 degree stereoscopic movies directly from the engine. I also developed a native C++ application for both Android and iOS, a WebGL-based product visualization web application and several in-house tools for assets processing.

## Education

### Academic qualifications.....

- University of Udine** **Udine, IT**  
*Computer Science , Thesis on Automatic camera management in a real time 3D environment* *2008–2012*
- ITI Malignani** **Udine, IT**  
*Mechanics and Automation* *2003–2008*

### Publications.....

- Leviathan: A New LTL Satisfiability Checking Tool Based on a One-Pass Tree-Shaped Tableau (IJCAI-16)**  
A C++ implementation of a tableau method for Linear Temporal Logic satisfiability checking.

## Technical skills

- Programming languages/API:** Proficient in C++, OpenGL, Direct3D 11 and Metal and GPU programming. Also basic ability with Vulkan, x86 assembly, C, Javascript, Haskell, Rust, Python.
- Others:** Multi-threaded programming, SIMD, data oriented programming, CPU/GPU profiling and optimization. Programming experience using Visual Studio and Xcode IDE, Unix shell/environment, Clang/GCC toolchains. Knowledge of Git and SVN version control system. Team-oriented mindset.

## Language proficiency

- English:** Fluent
- Italian:** Native