

# LUCA PALMILI

Senior Software engineer | Real-time graphics programmer | Unity 3D Expert | Interaction designer

Rome, Italy | [l.palmili@gmail.com](mailto:l.palmili@gmail.com) | +39 348 66 16 098

[Linkedin](#) | [Portfolio & blog](#) | [GitHub](#)

---

## SUMMARY

Computer Science and Human-Computer Interaction specialist with extensive experience in creating immersive and interactive experiences. Expert in real-time graphics, shader programming, VR/AR development, optimization and mobile applications. Proven track record in delivering cutting-edge solutions for museums, corporations, and educational institutions.

---

## SKILLS

- **Programming Languages** C#, Python, C, C++, Objective-C
  - **Graphics Programming** GPU/Shader programming (Cg, GLSL, HLSL), OpenGL
  - **Game Engines** Unity3D, Unreal Engine
  - **Technologies** VR/AR/XR, Projection Mapping, Computer Vision (OpenCV), ReactiveX (UniRx), Multiplayer (Photon)
  - **Other** 3D Modeling (Cinema4D, Blender), UI/UX Design, Arduino, CI/CD, Git, Problem-solving, Optimization, Documentation
- 

## MAIN EXPERIENCES / PROJECTS

### CTO & Founder, [VirtualBike](#)

01/2012 - Present

- Created an interactive installation allowing virtual tours through Rome neighborhoods
- Developed custom software for immersive cycling experiences

[Project link](#)

### Unity 3D Developer, [Schlumberger SLB](#)

04/2022 - 05/2024

- Developed 2 Unity 3D packages: a tile-based LOD terrain visualization and a data visualization grid
- Optimized WebGL 3D data processing performance
- Implemented advanced shader programming and procedural mesh generation techniques

### Unity 3D Developer, Various Projects

2016 - 2021

VR/AR

- [\[Amazon Italy\]](#) VR Multiplayer experience (Photon), in which the players share the same space, a common room: each player sees the other as an astronaut, and they can touch each other both within the VR simulation and in reality / [Project link](#)
- [\[T-Mobile\]](#) Interactive language-learning VR experience on google cardboard
- Developed and led VR training course for Architecture, Engineering, and Construction (AEC) applications / [Project link](#)

- [[Intertouch S.r.l.](#)] Custom editor tool for Unity 3D to create interactive 360 VR tour on google cardboard very easily / [Project link](#)

#### Corporate

- [[FASTWEB](#)] Interactive installations with data visualization for Fastweb [STEP](#) museum in Milan, with the use of compute shaders to optimize particle physics / [Project link](#)
- [[Mastercard](#)] An interactive table at the Airport of Rome, Fiumicino. 4 users at the same time can order lunch and pay / [Project link](#)
- [[ENI](#)] Two interactive installations inside the corporate building in Castel Gandolfo (IT). Both installations are multiplayer - one huge interactive video wall that acts as a media player, and an interactive table, which allows to explore documents of the society / [Project link](#)

#### Museums

- [[M9 Museum](#)] 3 interactive installations inside the museum, with particular effort on gamification / [Project link](#)
- [[FICO Museum](#)] Interactive installations inside the museum (The museum is now closed) / [Project link](#)

#### Other

- [[Over](#)] Unity3D WebGL domotic home simulator, that interacts with the user mobile phone / [Project link](#)

#### Published iOS Apps

- [Zombiance](#) - an app for creating outstanding Zombie pranks
- [Cam Espionage](#) - an app that allows you to be a 007 in the real world
- [FhumbApp](#) - an app which allows you to hide a photo into another via WhatsApp

#### **R&D Manager, [Clonwerk SRL](#)**

09/2010 - 12/2015

- Led research and development of custom hardware/software solutions for broadcast and public events
- Developed proprietary projection mapping software using OpenGL and Objective-C

#### **OpenGL developer, [MiBac](#)**

01/2008 - 01/2010

- Shader programming, OpenGL programming, 3D Modeler, Texturing
- 3D reconstruction of the church "Sant'Agnese in Agone" (Rome, Italy) for cultural heritage documentation / [Project link](#) / [Development Blog](#)

## TEACHING

#### **Unity 3D Instructor, [Accademia Italiana di Videogiochi \(AIV\)](#)**

10/2017 - 03/2022

- Taught comprehensive Unity 3D programming course, covering shaders, optimization, physics, Mathematics for game development, Navigation systems, Animation techniques
- Mentored students in game development projects, fostering creativity and technical skills
- Developed and led VR training course for Architecture, Engineering, and Construction (AEC) applications / [Project link](#)

#### **Unity 3D Teacher @ [I.I.S. Copernico, Pomezia, IT](#)**

01/2019 - 03/2019

- Won a PON (10862/FSE) (National Operative Program) organized by MIUR (Ministry of Education University and Research) named "Production of a mobile video game".
- Created and delivered an introductory game dev course focused on mobile applications

---

## CERTIFICATIONS

- [EITC/AI/GCML - Google Cloud Machine Learning / European IT Certification Inst](#) | 10/2024
- [EITC/CL/GCP - Google Cloud Platform / European IT Certification Institute](#) | 9/2024
- [EITC/CL/PPF - Python Programming / European IT Certification Institute](#) | 09/2024
- [Advanced VR Interaction Masterclass / XRBootcamp](#) | 01/2022  
Advanced course in hand tracking, Reactive programming with ReactiveX (UniRx), kinematic and physics-based interactions in VR
- **Unity certified programmer / [Unity Technologies](#)** | 09/2018  
Experience in the full software development lifecycle working from concept through completion

---

## EDUCATION

- **Master's Degree in Human Computer Interaction**  
University of Rome "La Sapienza" | 2005 - 2010
- **Bachelor's Degree in Computer Science**  
University of Rome "La Sapienza" | 2001 - 2004

---

## PUBLICATIONS

- [Virtual light to restore and interpret cultural heritage works](#)  
Proc. 4th Int. congress on Science and technologies for the safeguard of cultural heritage in the mediterranean basin, Cairo 6-8 December 2009, v. 1, 2010, pp. 468 – 472

---

## LANGUAGES

- Italian - Native
- English - B2

---

## REFERENCES / RECOMMENDATIONS

- [Bjarte Dysvik](#) Tech Team Lead at SLB Tech Team Lead at SLB
- Other Recommendations on my [Linkedin Profile](#)

---

I authorize the processing of my personal data in accordance with Legislative Decree no. 196 of June 30, 2003.  
Autorizzo il trattamento dei miei dati personali, ai sensi del D.lgs. 196 del 30 giugno 2003