Ruben Caliandro

Technical Director, Graphics and Game Programmer

Contact

Date of Birth	June 7, 1990
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Profiles

Github	https://github.com/chosko
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Personal	https://chosko.com

About

I work as Technical Director at Tiny Bull Studios, an indie game developer based in Torino (Italy). I work since 2016 in the video game industry and I have 10+ years of former experience as hobbyist in Game Programming and Graphics Programming.

I coded my first Graphics framework based on DirectX at the age of 15-17 and my greatest passion since then is shader programming. I also worked as Web Developer from 2010 to 2016, in companies located in Italy (Torino) and USA (Sunnyvale, CA).

I graduated with a Bachelor's Degree in Computer Science in 2012 and a Master's Degree in Virtual Reality in 2017, both with the score of 110/110 with honors.

Work Experience

Turin, Italy

Sep, 2020 — Present

1 year 3 months

Technical Director *at* ***Tiny Bull Studios srl:***

Technical Art Direction, R&D and team management

- *Researching state-of-art production and rendering techniques for specific types of game content, with an eye on CPU and GPU optimisation in advance*
- *Defining optimised workflows for creating and implementing game art in a feasible way for a small team of Artists*
- *Giving technical instructions to Artists and mentoring to Technical Artists*
- *Programming tools in support of art production workflows*
- *Shader programming*
- *Main Technologies: Nintendo Switch, Unity, C#, ShaderLab, CG/HLSL/GLSL*

Turin, Italy

Dec, 2016 — Aug, 2020

3 years 8 months

Graphics Programmer, Game Programmer *at* ***Tiny Bull Studios srl:***

Visual Effects and Game Programming

- *Shader Programming and Optimisation*
- *Particle Systems and Post-Processing*
- *Making the effects support Virtual Reality*
- *Main Technologies: Unity, C#, ShaderLab, CG/HLSL/GLSL, Oculus, Vive, PlayStation 4*

Turin, Italy - Sunnyvale, USA

Apr, 2010 — Sep, 2017

7 years 5 months

Full-stack Web Developer *at* ***various companies:***

Full-stack Web Development

- *Main technologies: Node/Express, Ruby/Rails, Angular, AWS, Docker, Databases, PHP*
- *More about the companies on LinkedIn*

Volunteer

Sep, 2009 — Jun, 2013

3 years 9 months

Film Projectionist, Cinema Teatro Cuore:

35mm Film Projections.

- *Film assembling and deassembling, security checks, film projections*

Education

Jan, 2013 — Oct, 2017

Score: 110/110 with honors

Università degli studi di Torino - Computer Science Department

Master of Science: Computer Graphics, Virtual Reality and Multimedia
Thesis: Visual Effects for Real-Time Stereoscopic Rendering

Sep, 2009 — Dec, 2012

Score: 110/110 with honors

Università degli studi di Torino - Computer Science Department

Bachelor of Science: Computer Science (Networks)
Thesis: Spam Analysis tools

Sep, 2004 — Jul, 2009

High School P. Gobetti

High School: Science
Thesis: Mathematics applied to 3D Computer Graphics Programming

Key Projects

Sep, 2020 — Jul, 2021

Confidential project

- *Technical direction, R&D, shaders, custom tools*

Dec, 2019 — Jan, 2020

Underwater VR — *Oculus VR Experience*

A VR experience in which you cruise aboard an underwater vehicle to explore some of the facilities of Italy's largest energy company.

- *Unity, C#, HLSL, Volumetric effects, Caustics, Stereoscopic VFX*

Nov, 2018 — Mar, 2019

Skill Steal — *PC (Prototype, Unreleased)*

A multiplayer battle royale where opponents can steal each other's skills.

- *Unity, HDRP, 500+ realtime lights in the same environment at 60 fps*

Dec, 2016 — Oct, 2017

Visual Effects for Real-Time Stereoscopic Rendering *(https://www.dropbox.com/s/3al2u9etsteaqcl/thesis_original.pdf?dl=0)* — *Master of Science Thesis*

Some VFX are not suitable for VR because they alter the correct perception of depth. The thesis shows a possible solution for a kind of distortion VFX applied to 3D models.

Dec, 2016 — Sep, 2018

Blind *(https://store.steampowered.com/app/406860/Blind/)* — *Oculus, Steam VR, PSVR*

Blind is a narrative-driven psychological thriller for virtual reality where the player is blind and must explore their surroundings using echolocation.

- *Fully custom lighting system and shaders for echolocation*
- *Light management and optimisation algorithms built from scratch*
- *Stereoscopic VFX and post-processing*
- *Unity, C#, CG*

Apr, 2007 — Jul, 2009

Mathematics applied to 3D Computer Graphics *(https://github.com/Chosko/high-school-thesis)* — *High School Thesis*

A thesis regarding some notions of trigonometry and geometric transformations, which I studied while making my first graphics framework, and a 3D demo application showing the solar system.

- *Made at the age of 16-19 with DirectX, C#, HLSL shaders*

Other personal projects

More about other projects on LinkedIn, GitHub and my personal website

Languages

Italian	*Native speaker*
English	*Professional working proficiency*

Interests

Guitar: *Electric Guitar, Classical Guitar*

Puzzles: *Rubik's Cube and others*