

Llorenç Solé Franquesa

PERSONAL INFORMATION



I'm a guy that loves technology combined with audiovisuals, playing music with my friends, and creating new projects to increase my knowledge about my concerns.

Now, I'm focused on the video game industry, specializing in Engine programmer. When I'm boring, I make fun doing some shaders.

CONTACT

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SKILLS

Programming Languages

C++ / C# • GLSL / HLSL • Python

Engine Programming

3D • Math transformations / algorithms • SDL
Graphics pipeline (OpenGL)
Audio pipeline (Encoding / Compression, DSP, OpenAL)

Graphics Programming

BRDF model (Phong/Cook-Torrance) • Shadows
Lighting • VFX Shaders

Programming Software

Git • Visual Studio • SHADERed • RenderDoc

Other Software

Unity • Unreal • Photoshop • 3D Max
Ableton Live • Wwise

LANGUAGES

Catalan (Native)
Spanish (Native)
English (Professional)

HOBBIES

Music
Gaming
Event organization

PROFESSIONAL EXPERIENCE

BMAT LICENSING | DIGITAL OPERATIONS ENGINEER

2018 - 2021 | Developer & Tech client manager (Tech-Ops)

- Working as a developer using Python, Docker, SQL, MongoDB, and AWS.
- In charge of different clients, giving technical support.
- Responsible for a small project, as technical manager.

EDUCATION

MASTER OF ADVANCED PROGRAMMING FOR AAA VIDEO GAMES | UPC SCHOOL

2020 - 2021 | Lead Audio & Engine Programmer

As **Audio Lead**, in charge of the composers team, the sound design, and creating sound effects for the project.

As **Engine Programmer**, developing **Tesseract**, our custom Engine created from scratch. In charge of different modules:

- Graphics: working on the pipeline. Micro facets BRDF Theory from Cook-Torrance. Lighting.
- Audio: implementing all audio functionalities using OpenAL library.
- Particle System: developing the full system.

Our final project, **Shut Down**, a cyberpunk-themed Twin-Stick Shooter.

BACHELOR'S DEGREE IN TELECOMMUNICATIONS | ETSETB SCHOOL (UPC)

2014 - 2019 | Audiovisual System specialization

Birds Sound Detection Using Convolutional Neural Networks The objective of this thesis is to learn how to train and test a Deep Neural Network using a Convolutional Neural Network architecture.

TECHNICAL PROJECTS

GOYA'S NIGHTMARE | UNITY VIDEO GAME

Cultura Abierta, 4º Edition Game Jam

Goya's Nightmare is a Slenderman-style game inspired in Goya's dark era paintings.

INDEPENDENT PROJECTS | C++, C#, PYTHON

In my free time, I like to develop some small projects from my own, for instance:

- Creation of VFX shaders
- Different 2D Games using **Unity** and **C#**
- A Telegram Bot for an association using **Python**

Personal work available in Github and webpage.

OTHER PROJECTS

Musician. Percussion instrument role

Always Drinking Marching Band and Digal's-hi Inquiets.

Organization of Cultural Events

Cultural and popular events in my city during the year, from a humor festival to folklore festivities.

Leisure monitor