

Curriculum Vitae

Personal dates

Name: Marc Gironés Dezsényi

Nationality: Spanish

Date and place of birth: Vilobí d'Onyar (Girona), 4th of July in 1988

Age: 31 years

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Academic Formation

Universitat Pompeu Fabra Master's degree in Video Game Design 2013 - 2014

Universitat de Barcelona

Bachelor's degree in Computer Engineering

2009 - 2013

Professional experience

Winsystem Senior C# Game Programmer

2019 - PRESENT

Programming of slot games, technical support and maintenance of updates. The technologies used in the project are: **DirectX** and **C#**.

Cirsa 2016 - 2018

MyBingo (C++ Game Programmer)

Programming of slot games, technical support and maintenance of updates. Develop of the new multi bingo games of Cirsa a sold under the brand named **MyBingo**.

The technologies used in the project are: **OpenGL**, C++ and **Internal Costum Script**.

Digital Legends Entertainment

2015 - 2016

Afterpulse (Gameplay / C++ Programmer)

Architecture, design and implementation of games for native mobile platforms, currently Apple iOS.

The technologies used in the project are: **Visual C++(Visual Studio)** Using project management tools such as: **Jira, Confluence** and **Plastic SCM.**

Barcelona Digital Technology Center

2013 - 2014

<u>eKauri</u> (Junior Programmer)

EKauri is an e-health and smart home platform that empowers seniors to gain autonomy, participate in modern society, and achieve independence through ICT-based solutions.

I was responsible for the design and develop of videoconference API based on WebRTC technology, support voice and video conference between Android and PC.

The solution was developed on Java, Python, GAE and WSO2.

Barcelona Digital Technology Center

2012 - 2013

Saapho (Internship)

The main objective of SAAPHO is to support Active Ageing by assisting seniors to participate in the self-serve society preserving and enhancing independence and dignity through the application of innovative ICT-based solutions.

My primary responsibility was develop a Social Gateway. The objectives of this gateway are providing communication tools to discuss, activities with friends, share photos and videos via Facebook, Twitter and Google+.

The system was developed in **Spring Framework, Spring Social, Spring Security, MySQL, SOAP** and **Hibernate**.

Projects & Publications

Insomnium Engine

2018 – PRESENT

I started developing my hobby game engine in January 2018. Designed for cross platform for Windows, Linux and iOS, later in iOS and Android. It's written in C++11, OpenGL and LUA scripting. (UI system, Entity Component System, State scripting, Deferred rendering)

Publications

2017 - PRESENT

In 2018, launched my personal blog where I start to write about programming related post. Posts has vary in content but mainly programming related. Most of them will be Proofs of Concept but I'm planning on writing about some general Computer Science.

Current Publication: Macros-X, Polymorphic wrapper in C++

Daisho 2015

It's a 3rd person combat game with platform elements, developed by 3 artist and programmers under own game engine (C++ & **DirectX 11**) to PC. My primary tasks was integrate scripting game AI, physic and graphics engine.

Human motion capture with KINECT (AR)

2014

It is application which capture the human movement with depth and the color camera and translate these movement on the virtual character.

The application was developed on C++ and OpenGL and used libraries of OpenNI and Primesense. And to make character rig I was reused Pinocchio Project (SIGGRAPH 2007)

BCNTours (AR)

2013

BCNTours is an application designed for tourists who are visiting Barcelona.

Its functions allow the user to get information about the plenty of points of interest in the city of Barcelona and will also tell you how to arrive to them using visual routes such as map and camera routes. They will also be able to identify those points of interest around you with both the camera and the map.

Languages

English: Level B of spoken and written

Catalan: Intermediate level of spoken and written (Universitat de Barcelona)

Spanish: Intermediate level of spoken and written (Escola Oficial de Idiomes)

Hungarian: Native level

Technique knowledge

Software engineering and UML.

Tools knowledge:

- IDEs: Visual Studio, Eclipse and Netbeans
- Game Engine: Unity, Unreal,
- Version control tools: Plastic SCM, JIRA, Git and Subversion
- Tools for modeling: 3D Studio Max, Blender
- Tools: Renderdoc by Crytek, VS Frame Analysis, AntTweekBar

Experience to develop game IA:

- Intelligence based on Behavior tree, Finite State Machine
- Path finding (Dijkstra and A* algorithm)
- LUA scripting
- Learning Algorithms

Knowledge to develop graphics engine:

- Deferred shading
- Parallax mapping
- Shadows and illuminations (Cascade shadow, Pointlights, spotlights and volumetric lights)
- Planar and cubemap reflection
- Post processing (SMAA, SSAO, DOF, Bloom, Godrays, Toon shading)
- Image processing (Seam carving, Bilateral filter)

Other knowledge:

- "Component Base Engine"
- Raycast, collisions, Mesh cooking, Actor controller on Physx
- Web Service, Spring Framework and Social Spring
- Extensive experience in design and coding of MySQL, NoSQL and msAccess databases
- General knowledge of data mining

Experience in program languages:

- 6 years in C++ (C++11 & C++14)
- 3 years in C#
- 5 years in DirectX11, OpenGL, HLSL and GLSL
- 4 years in Android, Java and C
- 1 year in LUA scripting, MaxScript
- 3 years in Python, Matlab, HTML, JSP, Javascript and Servlet