

CARLOS MARTÍNEZ GÓMEZ

Programmer and Designer

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globe cmartinezgom.github.io

STRENGTHS

Team work Fast learner
Self-starter Creative
Multidisciplinary Curious
Proactive

LANGUAGES

Spanish: **Native**

English: **IGCSE English as First Language / IELTS C1**

SKILLS

Unity 2D/3D UE 4/5

C# C++ C Java


Python Matlab Git


Jira Agile


Video editing Photoshop

WS Office Linux/Ubuntu


COURSES

 **Unreal Engine 5**
02/2024, by Carlos Coronado (Udemy)

 **Unreal Engine 4**
12/2023, by Carlos Coronado (Udemy)

 **C++ Programming for Unreal Game Development Specialization**
11/2023, by the University of Colorado System (Coursera)

 **Design, organization and evaluation of video games and gamification**
2017, by the European University of Madrid (Miriadax)

 **Unity3D**
2016, by the University of León

ABOUT ME

Creative programmer and designer with proven experience in game development and software engineering. Versatile and resolute programmer who is independently driven but also a solid team player.

EXPERIENCE

Junior Programmer | Maniac Panda Games

📅 05/2022 – 09/2023

📍 Remote

- Worked on **Racerloop**, a PC arcade racing game. Made with Unity. Developed by a small team where I had to work both under lead directions and on my own.
- Contributions in: AI, Synchronous Online Game Mode, Gameplay Systems, Automated Tests, Math Scripts and other topics.

Software Engineering Intern at HP SCDS

📅 09/2018 – 06/2020

📍 León, Spain

- Developed **MotionTracker**, a Python-based target tracking system that worked with both moving targets and cameras. Using agile methodologies.
- **Finalist of the XV "Programa Observatorio Tecnológico HP" awards.** 🌐

EDUCATION

Master's Degree in Video Game Design and Programming | Open University of Catalonia

📅 09/2020 – 01/2022

📍 Online

- Multidisciplinary course including 2D and 3D programming, game design, level design, UI design or artificial intelligence.
- **Master's Thesis:** Development of the video game **Katergaris' Labyrinth** 🌐.

Student Exchange | California State University Monterey Bay

📅 08/2019 – 01/2020

📍 California, USA

- Courses: **The Art of Storytelling (A+)**, **Graphics Programming (A+)**, **Environment Modelling (A+)**, **Character Design (A+)** and **Game Design II (A)**.

Degree in Computer Science | University of León

📅 09/2016 – 06/2020

📍 León, Spain

- Strong and wide grounding in the basic principles of maths, programming in different languages and design patterns.

Additional Education

- 93 credits, **joint studies of Mathematics and Computer Science degrees**. Strong and wide grounding in maths and calculus. University of Valladolid.
- Baccalaureate in Science and Technology. **With honors**.
- **English-Spanish Bilingual** Primary and Secondary Education within the framework of the agreement M.E.C./British Council.

ACHIEVEMENTS



Stimulation of Mathematical Talent Project (ESTALMAT CyL)
2009 to 2013



Musician
Professional Degree in Music, specialty French Horn



Basketball player and coach
Played the National Championship and won leagues

PRESENTATIONS



Environmental Storytelling in Video Games
Level Up León,
08/2018



Panel Discussion about Video Games with industry professionals
Level Up León,
08/2018

Check my full portfolio here: [Portfolio](#)

Racerloop with Maniac Panda Games | [Web](#) | [Trailer](#)

05/2022 – 09/2023

- **AI Players:** Movement, tracking, obstacle avoidance, gameplay systems, ideal racing lane, AI skill, fine tuning...
- **Synchronous Online Game Mode:** Menu, lobby, remote connection, player position, race progress, AI players and power up sync, reconnection...
- **PlayFab:** Implementation of PlayFab's server login, user save and load along with their statistics, global leaderboards...
- **Gameplay Systems:** Player Orbital Camera with Spring Damper System, Ship's hovering, Power Ups, Debug Renderer, AbstractInputs...
- **Testing Automation:** Automatic Testing of the game using Unity Test Framework.
- **UI:** Login, Leaderboards, Online and Lobby screens, as well as a general pop up error window.
- **Math Utils:** Several math scripts for needs such as working with 2D lines or projected positions.
- **Offline Build:** Worked on adapting back-end services from the server into the file system. Just for events with no internet connection.
- **Simple VFX:** Simple shaders and particles.

Flash your Fears | [Web](#) | [Itch.io](#) | [Repository](#)

02/2022

- Developed in one week for *Brackeys' Game Jam 2022.1*.
- Survival 2D game. In charge of overall direction and lead programmer.

Master's Thesis: Katergaris' Labyrinth | [Web](#) | [Report](#) | [Video](#)

09/2021 – 01/2022

- 2D *roguelite* dungeon crawler programmed and designed on my own as Master's Thesis.
- Procedural generation, stealth, sound, shops, storage and dialogue systems, original narrative and modular creation of objects, abilities and armors.

MotionTracker with HP SCDS | [Project Proposal](#) | [HP SCDS Awards](#)

09/2018 – 06/2020

- The *MotionTracker* project, part of my Internship with HP-SCDS, encompassed the development of a modular, Python-based application capable of tracking moving objects with a camera, even when the camera itself is in motion. Built utilizing the OpenCV library, it included an extensive documentation and investigation on design decisions, algorithms, and utilized technologies.
- Developed iteratively using agile methodologies, the project was highly successful:
- HP SCDS Internship: Received a grade of 9.5/10.
- Final Degree Project: Awarded a grade of 9.8/10.
- Industry Recognition: Selected as a finalist in the HP SCDS Awards.