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Javier Dieguez

Self motivated developer with coding experience both in large scale AAA teams and small contract work with indie developers. I have keen interest in 3D systems such as physics, animation and treatment of motion capture data.

Professional

Freelance (April 2021 - Present)

I have taken some freelance contracts since april 2021, doing game development and full stack web work.

Omni Digital Technologies - '[Pyscasso: A Disturbingly Creative Adventure](#)' (April 2021 - Present) - Game Developer:

Pyscasso is an independent game we have been developing in our spare time using Unity3D; Recently, our team has been growing and we jumped on to it full time. I have worked with Omni [several times in the past](#) and this is our first fully fledged game. Pyscasso is expected to launch on Q3 2023 for PS5.

Lead programmer, working on experimental gameplay elements of the core project. Writing game systems, documentation, mentoring.

[Talentum Digital](#) - Full Stack Web Developer (July - October 2021): Wrote the online shop of one of Talentum's clients, [Kú-Cycle](#). We used Wordpress and WooCommerce (php, javascript, html, mySQL)

Climax Studios - Coder (May 2019 - April 2021)

As a generalist coder I've worked on 3 different codev teams. UE4 C++.

Returnal - Online team (May 2019 - June 2020): As part of the online team I wrote netcode for the co-op multiplayer mode. This was often about receiving new features and adapting them for multiplayer with the help of UE4's replication graph.

Destruction All Stars - Accessibility team (July - October 2020): As part of the small codev team we came late into development of DAS to scope some key features the game would need to fulfil the client's expectations of accessibility.

Returnal - Accessibility team (October 2020 - April 2021): Another small codev team whose purpose was to add support for a series of options to make the game more accessible for all audiences.

Personal Projects

PiP Physics: 2D Physics solver

A solver I maintain for research and fun. An unique feature is the ability to switch between fixed and floating point decimal representations, as I wanted to compare the determinism and reduced accuracy of fixed point compared with the usual floats.

University highlights

Dissertation: [3D Physics Solver](#)

[3D solver](#) for Spheres, AABBs and OBBs, implementing SAT, space subdivision, and impulse based collision response.

Homebrew dev: Using the amazing [devkitpro](#) toolchain, I developed some sample games for Wii and GBA.

[Gameboy Advance](#) : [Puzzle bobble clone](#) using C and ARM assembly THUMB2 mode.

[Wii](#) : 3D C++ [pool game](#) using motion controls.

Technical (Tools, APIs)

- C, object oriented programming (C++, C#, Java) ARM assembly, Web development (html, javascript, php)
- Build systems (GNU Make, Ninja,..) Bash scripting, SCM (Git, P4, Plastic), MySQL handling
- Unity, UE4

Education

BSc Computer Games Technology (University of Portsmouth, September 2016 - July 2019): Upper 2nd class honours.

Hobbies / Misc

Coding, lately I've been playing with mocap at home using some Xbox One Kinects adapted for PC and putting them in Godot Engine. I have been into urban dancing for a big part of my life. I also like to play percussion sporadically, gaming and The Walking Dead.