Javier Dieguez

Self motivated developer with experience in indie teams as well as large scale AAA teams. 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 - (Psycasso: A Disturbingly Creative Adventure) (April 2021 - Present) - Game Developer:

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

Psycasso is a game we develop independently on Unity3D. I have worked with Omni several times in the past and this is our first fully fledged game; It's due to launch on Q3 2023 for PS5.

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

<u>3D solver</u> 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, Python, OOP (C++, C#,..), 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 dances for a big part of my life. I also like to play percussion sporadically, gaming and The Walking Dead.