



## Education

### MSc | Computer Science

University of Copenhagen | 2017-2019

- Study track focused in Video Games and Machine Learning

### Bachelors | Computer Science & Mathematics

Complutense University of Madrid | 2011-2017

### High School | Science

I.E.S. Profesor Hernández Pacheco | 2005-2011

- Grades: 9.25 out of 10 & 12.38 out of 14

## Skills

### Programming Languages

Proficient

C# • C++

Experienced

Java • Python

### Game Development

Engines

Unity - Proficient

Unreal Engine - Some experience

Frostbite - Some experience

Graphics

DirectX • OpenGL

### Version Control

Frameworks

Git • SVN • P4V

### Machine Learning

Frameworks

pytorch • tensorflow • scikit-learn  
keras

Algorithms

Neural Networks • Reinforcement Learning

### Databases

Frameworks

SQL

### General

Languages

Spanish (Native) • English (C1) • French (basic)

## Experience

### Electronic Arts (EA) | C++ Software Engineer

February 2022 - Today

- Frostbite | C++ Infrastructure Software Engineer

### Pendulo Studios S.L. | C# Software Engineer

January 2021 - February 2022 (1 year 1 month)

- Unity | C# Generalist Software Engineer

### Recreativos Franco S.A.U. | C++ Software Engineer

October 2019 - January 2021 (1 year 4 months)

- C++ Software Engineer for slot machine games

### Roasted Horse | C# Software Engineer

April 2019 - September 2019 (7 months)

### DADIU | C# Software Engineer

August 2018 - January 2019 (6 months)

## Publications

Training Pac-Man bots using Reinforcement Learning and Case-Based Reasoning

- Fernando Dominguez Estevez, Antonio A. Sanchez-Ruiz, Pedro Pablo Gomez-Martin, 2017: "Training Pac-Man bots using reinforcement learning and case-based reasoning" *iclr*

## Projects

### Alfred Hitchcock - Vertigo | Available for PC and Next-Gen Consoles

2021 | Used: C#, Unity

- I am currently working on this game at Pendulo Studios, as a Generalist Programmer. Also making the Nintendo Switch version of the game.

### Eros' Arrows | Available for Android

2018-2019 | Used: C#, Python, Unity

- Participated here as one of the main programmers during my time at DADIU.

### Data-Driven Character Animation | MSc Thesis Project at Copenhagen University

2019 | Used: C#, Python, Unity

- Project made as my master thesis. It is based on Daniel Holden's *Phase Functioned Neural Network for Character Control* research. The goal of the thesis was to make a simplified version of such animation system so it was more applicable in a real game production.

### Taining Pac-Man bots using Reinforcement Learning and Case-Based Reasoning | Bachelor Thesis Project at Complutense University of Madrid

2017 | Used: Java

- Project made as my bachelor thesis. It is a research on how to mix RL and Case-Based Reasoning algorithms to train bots that can beat Pac-Man game. This project was presented at CoSECVi 2017.