Rodrigo do Ó

Gameplay programmer

London | 07916 269037 | rodrigo.do.o.barbosa@gmail.com in linkedin.com/in/rodrigo-do-ó 😱 rodrigodoo.github.io/

Experience

Gameplay Programmer

Dez 2020 - Currently

Stainless Games

- Latest release: New World Rise of the Angry Earth
- Worked on AAA massively multiplayer online games (UE4/5; Proprietary Engine).
- Character movement and customization (UE4/5).
- Created tools for narrative and art teams (UE4/5).
- Created Asset Editing tools (Proprietary Engine).

C++ Software Developer

Jan 2020 - Mar 2020

Alten (Sophia Antipolis)

- Consultant Software Developer.
- Research of Machine Learning tools for C++.
- Allocated to Amadeus' Payment Department (Client).

Trainee (Full-Time)

Feb 2019 - Jul 2019

European Committee of the Regions

- Maintained IT databases and internal applications.
- Designed the internal framework for new employees.
- Project leader: Y-Factor Project "Capturing [Y]our Europe": edition topic European Identity. European-wide photo competition and exhibition displayed in the European Parliament.

President of the Fiscal Council (Part-Time)

Dec 2015 - Dec 2016

Federação Académica de Lisboa (Academic Federation of Lisbon)

- $\bullet \;\;$ Analyzed the federation's finances: guaranteeing sustainability and safe use of assets.
- Created internal financial evaluation procedures and rules.
- Prepared internal regulations with the board for future development

President (Full-Time)

Jun 2015 - Nov 2016

Associação dos Estudantes do Instituto Superior Técnico (Students Union IST)

• Elected to Represent 12000 Students

Managed the Students' Union assets:

- 1 Million€ budget
- A volunteer team of 100+ students
- 14 Full-Time employees.
 - Experienced workers;
 - Paid wages and social security
- Infrastructures
 - Swimming pool
 - Football/ squash/ tennis courts
 - Printing press
 - Study rooms
- Recovered the Students' Union from its bankruptcy state (400.000€ debt).
 - Designed a long-term strategic plan (10-year plan);
 - Requalification of employees, rebranding of services, investment in internal production, closure of failed projects.
- Organized large-scale events:
 - Arraial do Técnico, a music festival with 10 bands, 12.000 attendees and a 250.000€ budget, and
 - o Jobshop AEIST is a 3-day job fair with over 80 companies and over 11.500 students.
- Perfected the use of Facebook and Instagram analytics tools, developed campaign messages and coordinated with visual designers to create content.

Summary

- Passionate about Video Game Development, Programming, Writing, and Management.
- Resourceful, committed and resilient.
- Always looking for challenges and to learn something new.
- Team-oriented: I love bringing different personalities together to achieve a common goal.
- Capable of programming in several different languages.

Languages:

- Portuguese (mother tongue)
- English (C1)
- French (A2)
- Spanish (A2)

Hobbies

- Writing
 - Writing fantasy novel. (English)
 - Worldbuilding (Climate, Flora Fauna, Cultures, Religions)
 - Wrote poetry book (Portuguese)
- Playing Video Games:
 - RPG / Strategy (RTS and Turnbased)
 - Mass Effect & Dragon Age
 - Total War franchise
 - o Civilization franchise
 - Baldur's Gate 3
- Bass playing
 - Studied for 8 years
 - Played in clubs (Jazz/Rock/Blues)
- Capoeira
 - Practising capoeira with a London group.

Education

Integrated Masters in Electrical and Computer Engineering 2010 - 2018 Instituto Superior Técnico, University of Lisbon

Major: Telecommunication || Minor: Computer Science

<u>Thesis</u>: Ensemble of Machine Learning Algorithms for Economic Recession Detection.

- Learned several technical skills, and have very broad knowledge about technology, especially in the areas of energy, electronics, robotics, telecommunications, and computer science.
- Perfected my automation, programming, and economic skills by doing my thesis in machine learning applied to economics with the goal of detecting economic recessions in the United States of America.
- Studied cellular networks and their practical implementation (3G, 4G, 5G), the encoding
 of data (including visual), and the infrastructure of the internet and how to manage its
 assets.
- Studied advanced mathematics and physics

Skills

Game development

- Languages:
 - o C++
- Tools:
 - Proprietary Engine
 - Unreal Engine 5 (5.1)
 - Unreal Engine 4 (4.27 Chaos)

Concepts:

- Character Movement
 - Sliding, Climbing, Walking
 - Network replicated
- Character Customization
 - UI, Backend, Animation, NPCs
- Narrative Tools
 - String Tables, Dialogue Voices.
- Level Creation (Prototype & Tools)
- Tooling for managing and editing assets (Proprietary Engine)

General Programming

- Languages:
 - o Low Level:
 - Assembly (P3 Processor)
 - o Medium Level:
 - C/C++
 - o High Level:
 - Python / Java

Concepts:

- Object-Oriented Programming
- Memory Management
- Algorithms & Data Structures
- Source Control
- Abstraction

Network

- Languages:
 - 。 C
 - Python

· Concepts:

- Computer Networking
- Internet Infrastructure
- Internet Protocols (TCP/ UDP)
- REST Architecture

Machine Learning

- Languages:
 - Python
- Tools & Libraries:
 - Scikit-Learn / Pandas / Numpy
 - o PlotLy / Matplotlib

Concepts:

Random Forest Classifiers

- Logistic Regression
- XGBoost

Other skills

Leadership & Management

- Lead multiple teams of both small and big dimensions;
- Experienced in time management, budget calculations, work delegation, and output control:

• Proficient with Jira & Confluence;

Writing (Microsoft Word)

- Experienced in:
 - Creative writing
 - Political Motions
 - Academic Thesis
 - Meeting Minutes
 - Contracts
- Comprehensive knowledge of advanced formatting.