# ALEXANDRE CHICHARO

# www.alexandrechicharo.me

⊠alexandre.chicharo@tecnico.ulisboa.pt

C+351937349787 in linkedin.com/in/chicharoalexandre/

I'm Alexandre Chícharo I recently graduated with my master's in Computer Science Engineering. I am very passionate about video games both playing and making them. My love for games was the reason chose this path, on the way, I gained a deep appreciation for programming. My goal is to work in the game industry.

# Skills

<b>Programming Languages</b>		Gamedev
C++	C#	Unreal Engine 4
Java	Python	Unity 3D
С	Javascript	Blender
Julia	Lisp	Audacity
Typescript		Photoshop

# **Experience**

## **Junior Unity Developer - Kool Games** March 2022 - Present

Designing and developing mobile hypercasual /idle arcade/ multiplayer/blockchain-based games in Unity3D with C#. Working in a small team allows me to work closely with the design and art teams. I code mechanics with efficient, extendable, flexible code.

# Internship - National Institute of Informatics (NII), Tokyo October 2019 - April 2020

I Interned for 6 months and worked on the Unmanned Aircraft Systems Traffic Management (UTM) project for JAXA. Developed Drone Path Planning tools over the Tokyo Skyline using an Octree partition. The Octree partition, and path planning tools were developed in Java.

At the same time, I developed a Unity 3D Visualizing tool that allowed us to see and navigate the Octree partition displaying approximately 220000 buildings in real-time. I learn a lot about graphical optimizations including GPU instancing, batching, and mesh combination with a voxel renderer. The work I did there directly supported a P.h.D student's research and I ended up co-authoring the paper Multi-Agent Path Finding in Unmanned Aircraft System Traffic Management With Scheduling and Speed Variation published to IEEE Intelligent Transportation Systems Magazine

# **Education**

## Masters in Computer Science Engineering Instituto Superior Técnico September 2018 - November 2021

Specialized in Games but also doing courses in Intelligent Systems, Interaction and Visualization, and Software Engineering.
Graduated with a GPA of **17** 

#### **Favorite Projects:**

- CyberNoodles in Computer Graphics for Games: Built a game engine and implemented Deferred Rendering, Lighting shaders, and Screen Space Ambient Occlusion(SSAO)
  - OpenGL and C++
- Pain 2 Win in Game Design: 2D platformer rogue-like. For this game, I implemented the character movement, weapon system, melee/ deflect mechanic, moving platforms, and loot box vending machines.
  - Unity and C#
- Hybrid in Game Development Methodology: Asymmetric 2 player Coop Stealth game. For this game, I implemented networking and the hacker view, including a command-line interface, security camera hacking, and hacking objects to distract guards.
   Unitv3D and C#
- VR Tetris in Virtual Reality: Developed a Tetris game in 3D in VR. For this game, I implemented the tetromino spawner, line clearing, and a pickaxe.
   Unity3D and C#
- ClusterTechRush as a testbed game for my master thesis: 3D Topdown shoot'em up. For
  this game, I implemented Character movement, Two game modes, a flexible weapon system,
  procedural enemy spawning, procedural levels, teleporting between levels, Safety shield.
  Unreal Engine 4 and C++

#### **Favorite Courses:**

- Game Development Methodology: 18
- Game Design: 17
- · Computer Graphics for Games: 19
- Virtual Reality: 19
- · Artificial Intelligence in Games: 16
- · Autonomous Agents and Multi-Agent Systems: 18
- Advanced Programming: 16
- Master Thesis (Active vs Passive Flow Adjustment in Games): 18

## Degree in Computer Science Engineering Faculdade de Ciências da Universidade de Lisboa September 2015 - June 2018

Graduated with a GPA of 16

### **Favorite Projects:**

- TornGes in Construction of Software Systems: Chess Tournament Management software Java full-stack
- PhotoShare in Security and Dependability Photo sharing, secure, server-based, application Java
- Mimar Host Home for Children Management application MEAN stack

#### **Favorite Courses:**

- Introduction to Programming: 19
- Construction of Software Systems: 19
- · Object-Oriented Development: 18
- Computer Networks: 18
- Principles of Programming: 18
- Distributed Systems: 17

# **Hobbies and Interests**

I am very passionate about games I like playing in my free time, alone or with my friends, on PC, PS4, Nintendo Switch, Oculus Quest 2, mobile, or even tabletop, I play a little bit of everything and have over 700 games in my Steam Library. Besides playing I also like making them. I enjoy participating in game jams. I keep a list of Game design ideas and I'm always eager to learn more about game design and game development.

Has a computer science engineer technology is always a big part of my life. For that reason, I like being up to date on all the tech news. Be it about consoles, VR headsets, monitors, smartphones, electric vehicles, etc.

From my love of technology also comes a love for Drones. I have built my own FPV racing drone, and I'm training to be a good FPV Drone pilot.

Since I was in Japan I developed a deep appreciation for Japanese culture, especially for the food. Having difficulty finding good cheap ramen in Lisbon got me to dive into the rabbit hole of all the decisions that come into making a bowl of ramen. That journey made me into the ramen nerd I am today.

Last but not least, I love bubble tea. I could drinking every day.