CATARINA COSTA

SUMMARY

Computer Science Master's student at Instituto Superior Técnico, specializing in Game Development and Interaction/Visualization. I'm passionate about games, computer graphics, and building engaging, interactive experiences. I love combining creativity with technology to bring ideas to life.

EDUCATION

Master in Computer Science and Engeneering

2024 - now

Instituto Superior Técnico

• Specialization in Games and Interaction/Visualization.

Bachelor in Computer Science

2021 - 2024

Universidade Nova de Lisboa - Faculdade de Ciências e Tecnologia

WORK EXPERIENCE

Camp Monitor Intern - Run&Slide

13/08/2023 - 27/08/2023

- Camp Monitor Intern at the Castelo do Bode Summer Camp
- During the two weeks, I had the opportunity to gain hands-on experience in nearly every aspect of the summer camp. I assisted with organizing and supervising activities, helped set up and break down the camp, supported the administrative team and kitchen staff, and contributed to creating and arranging decorations for both the camp and its events.

EXTRACURRICULAR ACTIVITIES

HackerSchool Mar 2025 - now

- Member of the website development team
- · Member of the marketing team

GameDev Técnico May 2025 - now

- Participation in multiple game jams
- Programmer for a new project developed in Unreal Engine
- Member of the Infrastructure team

VOLUNTEERING

ExpoFCT 2022 / 2024

Tutoring - Igreja Nossa Senhora do Livramento

2023 - 2024

 Participated as a volunteer tutor in a support group for underprivileged youth, helping them with homework, test preparation, and overcoming academic difficulties. Helped primarily with English and Mathematics.

LANGUAGES: Portuguese: Native | English: C1

CATARINA COSTA

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PROJECTS

Thesis: OSOM-VR: Virtual Breakwater Exploration

2025 - now

Instituto Superior Técnico

 Master's thesis being developed in collaboration with INESC-ID and the Portuguese National Laboratory for Civil Engineering (LNEC), focusing on the design and implementation of a Virtual Reality application for the visualization and analysis of coastal breakwaters. The project explores how immersive technologies can enhance understanding and accessibility in the inspection and maintenance of coastal structures.

The Escape: Unreal Engine 5 Game

2025 - now

GameDev Técnico

• I'm a programmer for this game, currently working on the interactions system for our demo

Website Portfolio HTML | CSS | JS | Three.js 2025

https://catarinagc.github.io/

Streaming platforms Visualization HTML | CSS | JS | D3.JS 2025

Instituto Superior Técnico

 Dashboard for visualizing streaming platforms data done for my Master's Information Visualization course

https://github.com/IsabelaPO/Information-Visualization/tree/main/VI-20

CPU/GPU Ray Tracer C++ | GLSL 2025

Instituto Superior Técnico

- Projects made for my Master's degree course 3D Programming
- CPU ray tracer: for this project, we implemented a ray tracer that uses the CPU, stochastic sampling techniques, and acceleration structures
- GPU ray tracer: for this project, we implemented a GPU Progressive Path Tracer with motion blur, depth-of-field, and GGX Microfacets BRDF

https://github.com/rita-mota/DistributionRayTracer

Stylized Water Simulation C++ 2024

Instituto Superior Técnico

• Project for the Computer Graphics for Games class in my Master's degree

https://github.com/catarinagc/Stylized-Water-Sim

Roll The Credits Godot | GDScript 2024

Instituto Superior Técnico

• Project for my Game Design class in my Master's degree

https://an1ratak.itch.io/roll-the-credits

TravelGreen HTML | CSS | JS | JAVA 2024

Universidade Nova de Lisboa - Faculdade de Ciências e Tecnologia

 Final project for my Bachelor's degree, an app and website made to help reduce the user's carbon footprint.

Integrated features such as user ratings, secure authentication, and a reporting system.