

Ricardo Rodrigues

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WORK EXPERIENCE

Founding Member
Sopa Para Todos [02/2021 - Current]

City: Lisbon

Country: Portugal

Sopa para Todos is a movement with the purpose of helping fight hunger and re-launch the catering business (restaurants, cafés, etc.) in Portugal. The movement accomplishes this mission by inviting people to pay for a soup that will be gifted to those that need it.

This role currently requires the development of the website and map that contain information on the available businesses and the upkeep of servers and email infrastructure.

Project Manager of Smashcart Ultra

Game Dev Técnico [01/01/2020 - 01/01/2021]

City: Oeiras

Country: Portugal

Oversee and guide the development of Smashcart Ultra. Coordinate tasks and deadlines for the development of the game.

Teaching Assistant

Instituto Superior Técnico [09/2018 - Current]

Address: Oeiras (Portugal)

City: Oeiras

Country: Portugal

Provided assistance on multiple courses in the Bachelor's and Master's Degree in Computer Science and Engineering. Most notably I taught *Computer Graphics for Games* and *Game Design* courses. I was tasked with giving laboratory classes, where students would put into practice what they learned in the theoretical class with my help. Additionally, I also evaluated student projects and exams.

Coordinator

LabJogos, Instituto Superior Técnico [01/2018 - Current]

Address: Oeiras (Portugal)

City: Oeiras

Country: Portugal

Volunteering work at the Game Lab, maintaining assets - Computers, Mobile Devices, among others - organizing events, such as Global Game Jam, MOJO at Técnico, and Alumni Meetings, and Social Media engagement - creating posts, creating websites and online events.

Infrastuture Coordinator

GameDev Técnico [01/01/2020 - 15/11/2020]

City: Oeiras

Country: Portugal

Lab Manager

GAIPS, INESC-ID [06/02/2019 - 01/2020]

Address: Lisbon (Portugal)

Server maintaining - Security, and Platform integration.

 $\label{people management - integration of researchers in the workspace.} \\$

Assets Management - Computers, Mobile Devices, among others.

Events organization.

Researcher/Developer on Virtual Tutoring Project

INESC-ID [09/01/2017 - 08/01/2019]

Address: Oeiras (Portugal)

The work on the project **Virtual Tutoring** involves areas such as *Affective Computing* and *Embodied Conversational Agents*, which requires the specification and design of a computational model of Artificial Empathy as well as the development of a prototype for a software module that will mediate different dimensions of the interaction between an embodied virtual human tutor and a student in distance higher education scenarios.

Digital Marketing Engineer

t insight for brand movements [23/02/2016 - 06/01/2017]

Address: Lisbon (Portugal)

- Web Development
- Social Media Applications and Website Development
- Mobile Applications Development

Game Developer

Faculdade de Psicologia, Universidade de Lisboa [07/2015 - 10/2015]

Address: Lisboa (Portugal)

Developed Festarola, a serious game for kids between the ages of 8 to 10. I programmed and maintained the video game software and database.

Software developer

Mota-Engil [07/2013 - 08/2013]

Address: Linda-a-Velha (Portugal)

Summer Internship

- Database Management
- WPF Application Development

EDUCATION AND TRAINING

PhD in Computer Science and Engineering

Instituto Superior Técnico [09/01/2017 - Current]

Address: Oeiras (Portugal) Level in EQF: EQF level 8

This degree focuses on the field of Emotional Artificial Intelligence, but reaching also into Computer Graphics, Research methods and Teaching Skills.

Master Degree (MSc) in Information Systems and Computer Engineering

Instituto Superior Técnico [01/09/2014 – 11/11/2016]

Address: Oeiras (Portugal) Level in EQF: EQF level 7

This degree has two specializations, the first is in **Game Development**, which involves studies in three-dimensional objects' manipulation (in OpenGl and other platforms), images, video and audio editing and shader programming.

The second specialization is in **Intelligent Systems**, which involves studies in Artificial Intelligence, Planning and Search Algorithms and Natural Language Processing.

For this degree I received an award of merit for my performance.

Final Grade: 17

Bachelor's Degree (BSc) in Information Systems and Computer Engineering

Instituto Superior Técnico [20/09/2011 - 04/07/2014]

Address: Oeiras (Portugal) Level in EQF: EQF level 6

Degree is centered in two main topic, Computer Sciences and Engineering Sciences.

Computer Sciences focus on Information Systems and Computer Engineering.

Engineering Sciences gives the student the scientific bases to become an engineer, which includes Mathematics and Physics.

Final Grade: 15

Statement of Accomplishment for Video Games and Learning Course

University of Wisconsin-Madison [12/2013]

Address: Wisconsin (United States)

High School completion

Escola Secundária da Amadora [09/2008 - 07/2011]

Address: Amadora (Portugal) Level in EQF: EQF level 3

General Studies in Sciences and Technologies

Final Grade: 12.9

LANGUAGE SKILLS

Mother tongue(s): Portuguese

Other language(s):

English

LISTENING C1 READING C2 WRITING B2

SPOKEN PRODUCTION B1 SPOKEN INTERACTION B1

DIGITAL SKILLS

Google Drive / Microsoft Office / Social Media / Zoom / Google Docs / Organizational and planning skills / Decision-making

PUBLICATIONS

Towards Believable Interactions Between Synthetic Characters

[2017]

https://link.springer.com/chapter/10.1007/978-3-319-67401-8 48

Festarola: a Game for Improving Problem Solving Strategies

[2019]

https://ieeexplore.ieee.org/abstract/document/8864524

Interactive Empathic Virtual Coaches Based on the Social Regulatory Cycle

[2019]

https://ieeexplore.ieee.org/abstract/document/8925522/

Enriching Discrete Actions with Impactful Emotions

[2019]

https://ieeexplore.ieee.org/abstract/document/8925107/

DRIVING LICENCE

Driving Licence: AM
Driving Licence: A1
Driving Licence: A2
Driving Licence: B1
Driving Licence: B

PROJECTS

Smashcart Ultra

[07/2020 - 01/2022]

Smashcart Ultra is a low-poly shopping-cart simulator game where you get the chance to (or at least try to) control a crazy cart! Play a variety of minigames with your friends and end the game as the true victor! Just don't let the uncontrollable cart drive you insane!

https://smashcart-ultra.itch.io/smashcart-ultra

Virtual Tutoring

[2016 - 2019]

Virtual Tutoring is a mobile coaching application that presents two virtual coaches acting as tutors that help the user with his studies in Online Learning Environments, but are also aware of the users affective state.

https://sites.uab.pt/tutoria-virtual/

3Motion

[2015 - Current]

3Motion is an affective model that deconstructs the traditional atomic action into several steps, allowing each step to have an affective appraisal, giving more meaning to a single action.

https://link.springer.com/chapter/10.1007/978-3-319-67401-8 48

3Engine

[09/2017 - Current]

3Engine is an OpenGL engine that uses Physically Based Rendering techniques implemented over SDL2, that allows for a basis to experiment with different graphical technologies.

https://ricardoeprodrigues.github.io/3Engine/

Other Projects

Over the years I've developed several projects, here is a small compilation:

- Time is Ticking, a game where you die, you respawn, your previous body is now a block to jump on.
- **Bichux**, fun endless runner game with cute animals made with Unity on a small game jam.
- **CartBar**, a prototype of a web app to facilitate an order's delivery in a bar or restaurant, by giving the client a platform to make an order online. It was developed in a 24-hour contest called APPYDAY.
- **The Great Netventure**, a Railshooter game used to teach HighSchool Students about Malware on the Internet (developed for a game-related course during the Master's).

To see all my public projects visit <u>github.com/RicardoEPRodrigues</u>. Also, to see my published games on Itch.io visit https://guenestil.itch.io/.

It's important to note that I also contributed to large projects like Unreal Engine <u>Unreal Engine Pull Request</u> and Unity <u>UnityStandaloneFileBrowser</u>

I'm also involved with the Linux community, more specifically the Ubuntu distribution - <u>askubuntu</u> and <u>Linux-Magic-Trackpad-2-Driver</u>

JOB-RELATED SKILLS

Programming Languages

Proficient in C++, C, C#, Web Languages (PHP, HTML, Javascript and CSS), and GLSL Shader programming language.

Comfortable in working with Java, Prolog, and Lisp.

Computer Graphics and Applications

Experienced using Unreal Engine 4 and Unity 5 for game/experience development.

Some experience building an OpenGL Engine with basic Physically Based Rendering.

Artificial Intelligence

Experienced in creating affective intelligent agents, creating architectures that include decision making algorithms and computable emotions, specifically models using affect regulation strategies.

ORGANISATIONAL SKILLS

Teaching and Mentoring

Good organizational and teaching skills gained while mentoring and teaching students in Instituto Superior Técnico.

Management

Management of both Game Lab of Instituto Superior Técnico and GAIPS, gave insights on both social and organizational skills.

COMMUNICATION AND INTERPERSONAL SKILLS

Volunteering and Teaching

Good communication skills gained through my experience as volunteer on Serve the City Lisboa.

Helped younger students in their studies as their mentor, teaching assistant and through workshops on Programming Languages at Instituto Superior Técnico.

Event Organizer

Participated in the organization of several events, such as the International Student Day 2015, Global Game Jam at Técnico, Game Laboratory Alumni Meetings and MOJO at Técnico.

OTHER SKILLS

HEMA (Historical European Martial Arts)

[2021 - Current]

Recent practitioner of HEMA. My current training includes weapons such as Feder sword (bastard sword), medieval sword, rapier, staff, spear, and shield. I believe I am more proficient with the Feder, yet I have a taste for the medieval sword.

Krav Maga

[2011 - 2017]

Practitioner of the Israelite self-defense art.

Airsoft

[2015 – 2016]

Casual player in this military simulation sport.

Swiming

[2008 – 2011]

In my earlier years, I participated in tournaments. Currently, only practice it for fun and exercise.