JOSÉ ALEIXO CRUZ

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EDUCATION

Faculty of Engineering of the University of Porto — September 2019 - Present
Doctoral Program in Software Engineering - expected July 2023 — *Porto, Portugal*

· Research area: Safe and Robust Reinforcement Learning

Faculty of Engineering of the University of Porto — September 2014 - July 2019
BSc and MSc in Software Engineering and Computer Science - 3.2 GPA — *Porto, Portugal*

· Graduated top 15%. Exchange student in Zilina, Slovakia for a semester.

EXPERIENCE

LIACC - Artificial Intelligence and Computer Science Laboratory — September 2019 - Present
Research Assistant — *Porto, Portugal*

· Developed a computer vision pipeline to perform object detection and SLAM from monocular video.
· Built a reinforcement learning environment in Unity for training simulated pedestrians to navigate in a city.

ComplyAdvantage — June 2018 - September 2018
DevOps Intern — *London, United Kingdom*

· Improved security of 50% of AWS EC2 production instances by automating critical updates using Ansible.
· Automated code review and container deployment using Docker, GitLab, Terraform and SonarQube.
· Developed a Slack bot which facilitated the creation and fulfillment of JIRA tickets related to infrastructure issues.

HIGHLIGHTED PUBLICATIONS

· **Cruz J.A.** (2021) "*Learning Realistic and Safe Pedestrian Behavior by Imitation*". In 20th International Conference on Autonomous Agents and Multiagent Systems Doctoral Symposium (AAMAS 2021 DC).
· **Cruz J.A. et al.** (2020) "*Towards Predicting Pedestrian Paths: Identifying Surroundings from Monocular Video*". In Intelligent Data Engineering and Automated Learning (IDEAL 2020).
· **Cruz J.A.**, Cardoso H.L., Reis L.P., Sousa J. (2020) "*Reinforcement Learning in Navigation and Cooperative Mapping*". In 2020 IEEE International Conference on Autonomous Robot Systems and Competitions (ICARSC 2020).
· Cruz D., **Cruz J.A.**, Cardoso H.L. (2019) "*Reinforcement Learning in Multi-Agent Games: Open AI Gym Diplomacy Environment*". In Progress in Artificial Intelligence: 19th EPIA Conference on Artificial Intelligence (EPIA 2019).

HIGHLIGHTED PROJECTS

Diplomacy OpenAI Gym Environment - Master's thesis https://github.com/josealeixopc/gym-diplomacy
· An OpenAI Gym multi-agent environment that connects to a remote Java Diplomacy game engine using gRPC.

Diagramo - Make or Break hackathon winner https://github.com/josealeixopc/diagramo
· A Python and JavaScript web application that lets users create diagrams using a custom object-oriented language.

LEADERSHIP

JuniFEUP (junior company): co-developed the first FEUP Career Fair application for Android; led a team of two students building a company's website using Node.js libraries.

Microsoft/FEUP partnership: led a team of five students developing a chat bot for retailers with Microsoft Cognitive Services; presented the final product to a large audience (YouTube).

SKILLS

Programming Languages	*Proficient*: Python, Java. *Familiar with*: SQL, Bash, C++, JavaScript, PHP
Software & Tools	TensorFlow, OpenCV, Docker, Git, Linux
Languages	Portuguese (native), English (C2), German (A1)
Others	Team player, public speaker, avid runner, gamer