TIAGO ALMEIDA

Doctoral Student ◇ ORCID: 0000-0001-9059-6175
(+351) [redacted] ◇ tmr.almeida96@gmail.pt
29 May, 1996 ◇ Portugal

ABOUT ME

I am a doctoral student in Computer Science fields who has been motivated by Robotics and Computer Vision since his Master's Degree. After that, I have been developing some very important hard skills to deploy applications in those fields, such as Machine Learning, spanning from the study of Probabilities Theory to practical frameworks (e.g PyTorch and SciPy). Besides the complexity and outstanding results that has shown, characteristics that I appreciate, Machine Learning has the capability to change the current world paradigm and I want to be part of this. Nowadays, I am working specifically in Deep Reinforcement Learning. Apart from the work, I love travelling because it involves different cultures. That's why I have been travelling to other countries at least once a year. Finally, I like to develop and deploy homemade projects related to the area that is my main focus — Machine Learning.

EDUCATION

University of Orebro, Sweden *Sep 2020 - Present*
Doctoral Student in Computer Science
WASP – Wallenberg AI, Autonomous Systems and Software Program

University of Aveiro, Portugal *Sep 2014 - July 2019*
Master in Mechanical Engineering - GPA: 16/20

SPECIALIZATIONS

CS50 from Harvard University *Jun 2020*
CS50x

NVIDIA *Mar 2020*
Getting started with Deepstream for video analytics on Jetson Nano

Coursera *Dec 2019 - Feb 2020*
Deep Learning Specialization
TensorFlow in Practice Specialization
Applied Machine Learning in Python Course
Applied Plotting, Charting & Data Representation in Python
Introduction to Data Science in Python

Wall Street English, Aveiro, Portugal *Sep 2017 - Sep 2019*
First Certificate in English - B2

WORK EXPERIENCE

University of Aveiro, Portugal *Sep 2019 - Aug 2020*
Research Fellow
T.6.3.3 - Development of a flexible and low-cost localization and navigation system for PPS6 of the Produtech II SIF 24541 project.

Avesteel, Aveiro, Portugal *Aug 2016*
Mechanical Locksmith Assistant

Temporary job in Renault Cacia to improve some pratical hard skills. My task was to dismantle and clean engines from machines.

INTERNSHIPS

Renault Cacia, Aveiro, Portugal *Jul 2018 - Aug 2018*
Mechanical Engineer
Implementation of an artificial vision station on a production line to control the components quality. The software used was Sherlock.

PROJECTS

Multi-Camera and Multi-Algorithm Architecture for Visual Perception onboard the ATLASCAR2
Master's Thesis (Advisor: Prof. Vítor Santos) - Score 19/20

Personal Website: https://tmralmeida.github.io/projects/index.html

PUBLICATIONS

Almeida T., Lourenço B., Santos V., "Road detection based on simultaneous deep learning approaches", In: Robotics and Autonomous Systems. 2020, doi: https://doi.org/10.1016/j.robot.2020.103605, ISSN: 0921-8890

Almeida T., Santos V., Lourenço B., Fonseca P., "Detection of Data Matrix Encoded Landmarks in Unstructured Environments using Deep Learning." 2020 IEEE International Conference on Autonomous Robot Systems and Competitions (ICARSC), Ponta Delgada, Portugal, 2020, pp. 74-80, doi: 10.1109/ICARSC49921.2020.9096211

Almeida T., Santos V., Lourenço B. (2020) "Scalable ROS-Based Architecture to MergeMulti-source Lane Detection Algorithms." In: Silva M., Luís Lima J., Reis L., Sanfeliu A., Tardioli D. (eds) Robot 2019: Fourth Iberian Robotics Conference. ROBOT 2019. Advances in Intelligent Systems and Computing, vol 1092. Springer, doi: https://doi.org/10.1007/978-3-030-35990-4_20

PARTICIPATION IN CONFERENCES

ICARSC2020 *April 2020*
Presentation of the paper "Detection of Data Matrix Encoded Landmarks in Unstructured Environments using Deep Learning"
Fourth Iberian Robotics Conference - Autonomous Driving and Driver Assistance Systems (Special Session) *Nov 2019*
Presentation of the paper "Scalable ROS-Based Architecture to MergeMulti-source Lane Detection Algorithms"

RELEVANT TECHNICAL SKILLS

Languages	Portuguese, English
Programming Languages	C/C++, Python, Matlab, JavaScript
Libraries / Frameworks	Pytorch, OpenCV, SciPy, numpy, ROS
Tooling	Latex, Solidworks, Onshape, VSCode, Git
OS	Linux, Windows