TIAGO ALMEIDA

Mechanical Engineer \diamond ORCID: 0000-0001-9059-6175 (+351) 913969980 \diamond tmr.almeida96@gmail.pt 29 May, 1996 \diamond Portugal

ABOUT ME

I'm a mechanical engineer who has been motivated by Robotics and Computer Vision since my Master's Degree. After that, I've been developing some very important hard skills to deploy applications in those fields, such as studying the Computer Science basis in the Deep Learning domain and learning frameworks (e.g Tesorflow and Pytorch) that enable apply this AI subsets in practice. Besides the complexity and outstanding results that has shown, characteristics that I appreciate, Deep Learning has the capability to change the current world paradigm and I want to be part of this. Apart from the work, I love to travel and get involved with different cultures, that's why I've been travelling to other countries at least once a year. In addition, I like to develop and deploy my homemade projects related to the areas where I am currently working at.

EDUCATION

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 - Present

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 AT-LASCAR2

Master's Thesis (Advisor: Prof. Vítor Santos) - Score 19/20 **Personal Website:** https://tmralmeida.github.io/projects/

PUBLICATIONS

T. Almeida, V. Santos, B. Lourenço and P. Fonseca, "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, https://doi.org/10.1007/978-3-030-35990-4_20

PARTICIPATION IN CONFERENCES

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

LanguagesPortuguese, EnglishProgramming LanguagesC/C++, Python, Matlab, JavaScriptLibraries / FrameworksOpenCV, numpy, ROS, Pytorch, TensorflowToolingLatex, Solidworks, Onshape, VSCode, Git

OS Linux, Windows

EXTRA-CURRICULAR

Think Twice 40 hours programming	2020
Monitor at UA Summer School (Laboratory of Automation and Robotics)	2019
Sunset Hackathon Participation	2018, 2019
EBEC Participation	2018, 2019
4th. place in the ABC-impressão a 3D competition	2016
ABC Chain Reaction Participation	2015
Football player at the A.D. Taboeira	2004-2012