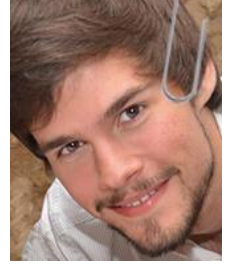


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ABOUT ME

I am a Jack-of-all-trades, keen on mastering them all. Showing my talents in order to add value to the roles I perform and improving even further is one of my passions. I have a particular interest in Artificial Intelligence areas such as Machine Learning, Planning, Computer Vision and Robotics. Outside computers, I am a poetry writer, music lover, photography enthusiast and a fairly decent juggler.

EDUCATION

Faculdade de Engenharia da Universidade do Porto 2011 – 2016
Master in Informatics and Computing Engineering
Final grade: 18/20 – Grade A on the European grading scale

WORK EXPERIENCE

ESO – European Southern Observatory Munich, Germany
Control software engineer Jul 2017–Jul 2019

- Development of control software for the European Extremely Large Telescope (E-ELT)
- Prototyping, development and documentation of software under strict requirements
- Implementation of low-level, high-performance, control loops using C and C++
- Implementation of high-level tools and interfaces using Python and Qt
- Development and testing of automated continuous software deployment solutions
- Participation in DevOps related prototyping and development

LIACC – Artificial Intelligence and Computer Science Laboratory Porto, Portugal
Researcher and developer Jul 2016–Apr 2017

- Application of Computer Vision methodologies to *Intelligent Transportation Systems*
- Industry integration of research results in collaboration with the company *Armis Group*

MASDIMA Porto, Portugal
Systems integrator and developer Oct 2014–Sep 2015

- Multi-agent protocol/algorithm development and maintenance
- Pre-existent systems integration and documentation

TECHNICAL SKILLS

- **Operative Systems:** Windows (4/5), Linux (3/5), Android (4/5), iOS (1/5), Mac OS (1/5)
- **Programming Languages:** Java (4/5), Python (3/5), C++ (3/5), C# (3/5), C (3/5), JavaScript (3/5), Scala (2/5)
- **Web Technologies:** HTML5 + CSS (3/5), Spring Framework (3/5), Node.js (2/5), AngularJS (2/5), PHP (2/5)
- **Databases:** PostgreSQL (4/5), MySQL (2/5), SQLite (2/5)
- **Machine Learning & Computer Vision Tools:** RapidMiner (3/5), OpenCV (3/5), TensorFlow (2/5)
- **Continuous Integration and Deployment Tools:** Jenkins (3/5), HashiCorp Nomad (3/5)
- **Other Tools and Frameworks:** LATEX (4/5), FFmpeg (3/5), Qt (2/5)

PROFESSIONAL DEVELOPMENT

- **Artificial Intelligence Planning Course** Jan–Mar 2015
Coursera – Edinburgh University
- **Machine Learning Course** Sep–Dec 2014
Coursera – Stanford University

PUBLICATIONS (complete list on my personal website)

- **The ELT M1 Local Control Software: From Requirements to Implementation** 2019
2019 17th Biennial International Conference on Accelerator and Large Experimental Physics Control Systems (ICALEPCS2019)
Authors: L. Andolfato, J. Argomedo, C. Diaz Cano, R. Frahm, T. R. Grudzien, N. Kornweibel, D. Ribeiro Gomes Santos, J. Sagatowski, C. M. Silva
- **A Methodological Approach for Inferring Urban Indicators Through Computer Vision** 2018
2018 IEEE International Smart Cities Conference (ISC2)
Authors: Sara Paiva, Diogo Santos, Rosaldo J. F. Rossetti
- **Adding the Third Dimension to Urban Networks for Electric Mobility Simulation: An Example for the City of Porto** 2018
Developments and Advances in Intelligent Systems and Applications
Authors: Diogo Santos, José Pinto, Rosaldo J. F. Rossetti, Eugénio Oliveira
- **Integrating Electric Buses in Conventional Public Transit: A First Appraisal** 2016
Master's Degree Dissertation - Master in Informatics and Computing Engineering
Faculdade de Engenharia da Universidade do Porto

DISSERTATION SUPERVISION

- **Inferring Urban Indicators Through Computer Vision on Google Street View** 2018
Master's Degree Dissertation - Master in Informatics and Computing Engineering - FEUP
Author: Sara Paiva; Supervisor: Rosaldo J. F. Rossetti; Co-Supervisor: Diogo Santos
- **Computer-Vision-based Surveillance of Intelligent Transportation Systems** 2017
Master's Degree Dissertation - Master in Informatics and Computing Engineering - FEUP
Author: João Neto; Supervisor: Rosaldo J. F. Rossetti; Co-Supervisor: Diogo Santos

COMPLEMENTARY ACTIVITIES

- **Microsoft – Microsoft Student Partner** Nov 2014–Sep 2015
Sponsored by Microsoft to hold events and lectures.
- **nuIEEE – IEEE Student Branch, Universidade do Porto** 2013–2016
Member. Official IEEE branch, offering activities for student members.
- **Presenter - nuIEEE Java workshop (2nd edition)** Mar 2014
Along with logistics, creation of tutorial exercises and technical support.

LANGUAGES

Portuguese
Native language

English
Advanced

Spanish
Basic – Intermediary

German
Basic