João Diogo Fernandes Louro

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EDUCATION

09/2013 - 11/2018	**University of Lisbon - Instituto Superior Técnico**, *Integrated Masters in Aerospace Engineering, Major in Avionics, Minor in Control and Systems, 16/20 (top 30%)* - Ranked #11 Engineering University in Europe and #1 in Portugal in the USNews 2018 University Ranking; - University course with the highest access grade in Portugal in the last two years.	Lisbon, Portugal
09/2016 - 02/2017	**Universitat Politècnica de Catalunya - ESEIAAT**, *Erasmus Program, 8.25/10* - Ranked #12 Engineering University in Europe and #1 in Spain in the USNews 2018 University Ranking.	Barcelona, Spain

WORK EXPERIENCE

02/2018 - 10/2018	**GMV, Embraer**, *Master's Thesis Intern* - Master's thesis - development of a C++ application for end-to-end delay analysis of AFDX (Avionics Full-Duplex Switched Ethernet) networks, the new standard in commercial aviation data buses; - Work developed in contact with and under specifications of Embraer; - Detected inconsistencies in relevant research on worst-case end-to-end latencies in avionics networks.	Lisbon, Portugal
09/2017 - 02/2018	**Data Science for Social Good Europe**, *Researcher* - Developed a machine learning-based Python application to pinpoint unlicensed swimming pools using RGB high-definition satellite imagery for the Municipality of Cascais, Portugal.	
10/2017 - 02/2018	**PrimeIT**, *Prime College Ambassador* - Established a connection between PrimeIT and my university, facilitating the company's presence in events.	
07/2017 - 09/2017	**University of Chicago Data Science for Social Good Fellowship**, *Research Fellow* - Worked with the Municipality of Rotterdam to develop a machine learning-based Pyhton tool to classify the use of Rotterdam's rooftops using aerial imagery and the Netherlands' building database; - Maintained a close relationship with the representatives of the municipality, with weekly remote meetings; - Awarded with a travel grant to present the work at the 2017 DSSG Conference, in Chicago, USA.	

LEADERSHIP AND VOLUNTEERING EXPERIENCE

09/2014 - 02/2018	**Aerotéc – Aerospace Engineering Students' Board**, *Senior Member* - Organized and taught a paid technical course with 30+ attendants; - Coordinated visits to high schools, which included workshops and some vocational advice; - Part of the team that competed in the 2017 Air Cargo Challenge, a European competition aimed at aerospace engineering students. Achieved 15th place out of 28, with relatively low funding and support; - Organized "Aerospace Weeks", week-long events joining prominent players in the Portuguese and European aerospace industry and undergraduates.	Lisbon, Portugal
07/2014 - 09/2014	**Leigos Missionários da Consolata**, *Informatics Teacher* - Taught classes to young adults and provided aid in a humanitarian mission's various actions; - Organized fund raiser campaigns and events, such as a live music dinner with 100+ attendants, contributing to gather a total of over 5000 euros, which were offered to the humanitarian mission; - Gained extensive public speaking experience while raising funds in churches and various events; - Trip featured in the September 2014 edition of the Fátima Missionária magazine.	Empada, Guinea-Bissau
05/2012 - 09/2013	***Talitha Kum,*** *Founder and Volunteer* - Organized gatherings of food and clothing items, which were distributed to people in need; - Organized visits with a youth group to elderly and bedridden people.	Cardigos, Portugal

ADDITIONAL INFORMATION

Technical Skills	*Experienced in C++, Python (Numpy, Pandas, SciKit-Learn), Matlab/Octave, C, Solidworks.* *Some knowledge of Amazon Web Services, Microsoft Azure, SQL, HTML.*
Languages	Portuguese (native), English (highly fluent), Spanish (conversational), French (conversational).
Honors	Highest university access grade in the Mação municipality of the 2012/13 academic year, near-perfect score on the Portuguese standardized math exam (196/200).
Certificates	Bloomberg Market Concepts, Siemens S7-1200 PLC & HMI from Scratch using TIA (Udemy).
Interests	History, Fitness, Winemaking, Free and Open Source Software.