# João Diogo Fernandes Louro

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Recent MSc graduate in Aerospace Engineering with relevant programming experience. Strong interpersonal and leadership skills, and excited about starting a meaningful career in the technology industry.

#### **EDUCATION**

#### University of Lisbon - Instituto Superior Técnico

Lisbon, Portugal

Integrated Master's Degree in Aerospace Engineering; 16/20 (top 30%)

Sep 2013 - Dec 2018

- Graduated with a Major in Avionics/Electronics and a Minor in Control&Systems;
- IST was ranked #11 Engineering University in Europe and #1 in Portugal in the USNews 2018 University Ranking;
- Aerospace Engineering at IST was the university course with the highest access grade in Portugal in the last two years.

#### Universitat Politècnica de Catalunya - BarcelonaTech

Barcelona, Spain

Master's Degree in Aerospace Engineering; 8.25/10

Sep 2016 - Feb 2017

- Barcelona Tech was ranked #12 Engineering University in Europe and #1 in Spain in the USNews 2018 University Ranking

### WORK EXPERIENCE

GMV, Embraer
Master's Thesis Intern

Lisbon, Portugal

Feb 2018 - Nov 2018

- Developed 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.

### Data Science for Social Good Europe

Lisbon, Portugal

Researcher

Sep 2017 - Sep 2018

- Developed a machine learning-based Python application to pinpoint unlicensed swimming pools using RGB high-definition satellite imagery for the Municipality of Cascais, Portugal.

## LEADERSHIP AND VOLUNTEERING EXPERIENCE

# University of Chicago Data Science for Social Good Fellowship

Lisbon, Portugal

Fellow, Team Leader

Jun 2017 - Sep 2017

- Led a team throughout the development and delivery of 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 Municipality of Rotterdam, with weekly remote meetings;
- Awarded with a travel grant to present the work at the 2017 DSSG Conference, in Chicago, USA.

#### Aerotéc – Aerospace Engineering Students' Board

Lisbon, Portugal

Senior Member

Sep 2014 - Feb 2018

- Organized and taught several paid technical courses, each 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;
- Led the organization of "Aerospace Weeks", week-long events joining prominent players in the Portuguese and European aerospace industry and undergraduates.

### Leigos Missionários da Consolata

Empada, Guinea-Bissau

Jul 2014 - Sep 2014

International Volunteer, 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;
- 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.

# Additional Information

- Technical Skills: Experienced in C++, Python (Pandas, SciKit-Learn, fastai), Matlab/Octave, C, Solidworks, Excel, shell scripting. Some knowledge of Tableau, 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 maths exam (196/200).
- Certificates: Bloomberg Market Concepts
- Interests: History, Fitness, Winemaking, Free and Open Source Software.