# Jose Xavier Ferreira Da Silva

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Driving Licence • Own Car

## Personal statement

I am graduated in Informatics & Telecommunication Engineer. At the moment I find myself enrolled in the Faculty of Science and Technology (UNL), finishing my PhD in Electrotechnical and Computer Engineering - specialization in Computing and Perceptional Systems.

My competencies (more than 30 years), gives me an excellent track record in top management, technical director, heads of the engineer, project manager, project engineer, hands-on, OJT and implementation; high value placed on teamwork, flexibility, and quality interpersonal communication and strong analytical, conceptual and organization skills.

My Area of knowledge comprises: IT ● Software Engineer ● Embedded Systems ● Marine Systems ● Optical/Copper/Wireless Networks ● Intrinsic Environmental Communication ● (IP)PABX ● CCTV and Security Systems ● Aeronautical Systems ATM/CNS ● RF Telecommunication ● Aeronautical Fixed Telecommunication Network (AFTN/AMHS) ● ATS Message Handling System (AMHS) ● Microwave Bridge, Repeaters, Network Security/Cisco PIX/CCNA ● Multiprotocol Label Switching (MPLS) -traffic engineering ● SCADA (PLCs / RTUs) ● Meteorology (AWOS) Systems ● Microcontroller ● Solar Panels (PV) and Fuel Cells.

I speak English, Spanish, Portuguese, and understand a little French and Italian.
I am a member of the Royal Aeronautical Society.

## Education

### University Nova de Lisboa - Portugal
*(2013 – 2015)*

Attend a PhD in Electrotechnical and Computer Engineering - Specialization in Computing and Perceptional Systems

### University Nova de Lisboa - Portugal
*(2011 – 2013)*

Diploma of Advanced Studies in Computer and Perceptional Systems as part of the PhD.

### ISUTC
*(2001 – 2006)*

Graduate in Informatics and Telecommunication Engineer

## Training

- Training D-Link
- CISCO - CCNA
- Network Security / PIX / CISCO (AFRALTI)
- Multiprotocol Label Switching (MPLS) - Layer 2/3 traffic engineering (by IIT Canada)
- Training CGE ALSTHOM / ATR / ALCATEL telecommunication.
- Training IMPULSE PHYSICS meteorological stations GmbH
- Training VAISALA meteorological stations, Finland.
- Linux / Windows Operating System
- RICOCHET recording systems - Norway
- FREQUENTIS Voice Control Systems - Austria
- HARRIS - Voice Control Systems - Canada
- COMSOFT – (AMHS/AFTN/ADS-B) Aeronautical Communication - Germany
- MESOTECH - Meteorology – USA
- EADS – Radar - Germany
- SELEX – ILS - Italy
- PIC Microcontrollers (Microchip certified company)

# Work Experience

## Project Engineer at Gatwick Airport of London
*(11/2015 to present*

Responsibility to plan and control the execution of engineering projects in Communication, Navigation and Surveillance (ATM/CNS), such as the replacement of the old Perimeter Telecom Cable network for High Availability Optical Fibre (>99.999%), included the Route re-Design, System Analyses, System Requirements, Cabinets, Network Monitoring System, medium converters – RS232, 485, 422, Ethernet, SDH, MPLS-TP), 10GbE with Ethernet Ring Protection (self-healing), Pit & Ducts, using the latest Standards and recommendation.
Project for the replacement of the old Schmid VCCS ICS 200/60, for new fully IP technology (including PABX, GPS master clock, recorders, network).
Replacement of the old Park Air radio, implementing the new VHF 8.33 kHz (Main and Standby + last resort) at both towers.

Elaborate Specifications and Requirements, Interface Control Document (ICD), drawings, Scope of Work (SoW), Project Brief, help on the safety case, risk register, health & safety, implement techniques and resources needed to enable the integration, installation, operation and equipment's maintenance. Helping IT Team as a Business Analyst.

Coordination of project development, collecting metrics, supplying needs, recruiting adequate resources and keeping the focus on the project goal, in addition to:

- Always be alert, but not averse to change;
- Be sensitive to political issues: the interests of stakeholders not always converge;
- Schedule meetings, follow the training, FAT, SAT, THO (Commissioning).

## Technical director/ Project manager at Cartil SA
*(01/2007 to 2013)*

Requirements Analysis, Design & construction (Site Survey, installation, SAT, FAT, Commissioning, documentation). NavAid Systems (Radar, ILS, DME, NDB, DVOR, ADS-B, etc.).
Electronic Systems at airports, Radio Telecommunications, Network.
Engineering Software - C #, C ++, C, DEPLHI, MySQL, Embedded Systems, etc.
Project & Installation of Ethernet CAT5 / 6, Wireless, Fibre-Optics, Microwave Bridge, Repeaters.

Rehabilitation from scratch of 9 Airports in Angola (Telecommunication, Network, AWOS, and Security), including Luanda, with the installation of all Airport TWR equipment.

- VCCS (Harris & Frequentis VCS),
- Meteorology Station – AWOS - (Vaisala & Mesotech),
- Aeronautical Communication in VHF AM A/G, VHF FM G/G, HF SSB, and Cellular
- Professional mobile radio/ private mobile radio (PMR)/ (LMR), RF, GPS, RF Links, SAT, BST
- NDB, DVOR, ILS, GBAS, DME, RADAR
- AMHS/AFTN,
- Digital Recorders,
- Network LAN, WAN, Cisco Layer2/3, CAT5/6, Microwave Bridge, Fibre Optic, etc.
- Fibre Optic on Luanda´s Airport perimeter and Data Centre
- CCTV & Access Control, (IP)PABX
- Solar Panels (PV), Fuel Cells as backup
- SCADA (PLCs / RTUs)

- Meeting with clients, negotiating and implementing proposals after having been agreed.
- Technical Proposals and Budgets
- Internationalization of Cartil, opening up to new business opportunities
- Business Support

Complete Site Survey at Maputo Airport (for GECI) - Spain.
Project & design of 2 Mobile ATCs (Angolan Air Force & ENANA) complying w/ ICAO standards.

Project & presenting ADS-B Mode-S (w/ ComSoft) for ENANA.
Project & installation of Solar Panels (PV)/Fuel cells to be used as DVOR's main power supply.
ToR for migration from AFTN → AHMS for ENANA.
Installation, commission, and Training for AMHS/AFTN (X.400) in Luanda.

ATC Towers project, design including FDIS, VCCS, VHF AM T/A, VHF FM T/T, HF, NDB, DVOR, ILS / DME, AWOS and Digital Recorders for ENANA.

Project & Installation of AWOS Stations MitrasIV, Ceilometers, RVR with Vaisala aviMet, Frequentis TapTools Data Management, servers (Windows & Linux) - Monte Real & Beja Air Force - Portugal.
Maintenance: ILS/DME, EADS/EASAT Secondary Radar (SSR MarkXII/A- IFF) on Montreal & Beja Air Force - Portugal.

Software Client/Server (RS232/TCP) for 8x8 VGA Matrix control for Civil Protection in Lisbon.
Design and programming PIC µcontroller for a rotating beacon motor (PWM) with fault detection.

Meteorological Data controller w/ PIC µcontroller & application in C#, C, C++.

## Engineer Director – EPC Engineer / Project Manager at Intelcom Lda
*(01/2000 to 2006)*

LAN installation and upgrading, using the latest copper and fibre technologies, such as structured cabling (voice and data over the same cabling).

Extending and upgrading legacy infrastructures such as Category 3 & 5, Token Ring, 10Base2 and 10Base5, to the latest specifications and beyond.

Testing third-party installations copper, voice, data and fibre networks to ensure optimum performance, using a Fluke DSP4100 or any fibre OTDR.

WAN installation and configuration using the latest Layer 3 switching products (Cisco).
Supply and installation of high-performance multi and single-mode optical fibre cables for backbone and desktop applications.

Wireless Networking System – installation and project for CASA MILITAR (military president's guard).

Rural public street lighting project using solar panels (PV) in Mozambique.

Supply, installation and configuration of analogue and digital telephone systems, from 4 extensions to hundreds of extensions/ports, including all necessary cabling.

Delivery of PSTN exchange lines, ISDN services and independent telephone system maintenance.

APRS project using cellular phones and owner developed program (software) system, using Delphi7 and MySQL database. The hardware uController using PIC.

Java's project – building personal bank software with MySQL's Database link.

Web Page - JSP 2.0, JS, HTML and PHP, LINUX

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## Engineer Director / Project Manager Co-owner at Digitel Lda
*(01/1992 to 2000)*

Networks design, planning and documentation using the latest standards communication technology.
Power supply backup project and installation for public telephone exchanges using Solar Panels (PV) for Mozambique Telecom (TDM).
Training courses in networking and radio communication for CFAM.

**Security Systems & CCTV**

Installation and project for Security Systems & CCTV on all Mozambican Embassies located in Malawi, Swaziland, Zambia and Zimbabwe.
Mozambique's President - Satellite system communication using Mini-M, INMARSAT and IRIDIUM for voice and data with Advanced Encryption Standard (AES).

**Other**

Build a Data Base for 5th Police Station.
Police Minister – Project and installation of network and computer system.
RM – Radio Station – Portable voice and Data system using IRIDIUM satellites.
Project using HF, VHF, UHF, Repeaters and BST for data communication in Mozambique, Swaziland and Angola, using dedicated software and surveillance equipment.
Participation with RACAL UK - on building vessel's location System (Radar) along Mozambican coast.

***Installation***

• *Avionics Communication*, (GPS, VHF, HF, Radar, etc.).
• *Marine Equipment* – EPIRB distress radio, sonar, sounders, plotters, GPS, Satellite Communications, etc.
• *PMR Cellular in* VHF and UHF with repeaters base stations.
• *Intrinsic Environmental Communication*

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## Engineer at Telescan Lda
*(01/1988 to 1990)*

Airbase nº 1 in Sintra, Portugal- Project and Installation of meteorological station (AWOS) using IMPULSE PHYSICS and VAISALA sensors.
Monte Real Air force - Repairing and assistance on Meteorological (Weather) Station.
Two way radios - Project and installation of two way radios.
Navigation Marine Equipment - Radar, Sounder, HF/VHF, Sonar, Auto-pilot, Plotter, Gyroscopic, GPS, Satellite, (Furuno, Icom, JRC, Raytheon, Sailor, Thrane & Thrane, Dansk radio,).
Links - BST, Repeaters, Long distance communication, etc.

## Hobbies & Interests

I have a keen interest in Music, Robotics and Aeronautic. I play drums and I design RC airplanes and Robots.

Also I am very concerned about the asymmetries in the world, between richest and poor countries, and all the involved violence.

I have joined an organization who helps 3rd world countries, mainly Mozambique.

## References

References are available on request.