Juan Pedro Mediano Alameda

Senior Satellite System Engineer
Mres/MPhil in Telecommunication Technologies
MSc. Telecommunication Engineering
Security Clearance

Date of Birth: 6th of August, 1983
Nationality: Spanish

WORK EXPERIENCE

- **Senior Satellite System Engineer / Project Manager at Satellite Applications Catapult**
  Harwell (United Kingdom)
  Mar'14-Currently

- **Senior Satellite Payload Engineer at SSTL (Surrey Satellite Technology)**
  Guildford (United Kingdom)
  Nov'10-Mar'14

  o Technical Leader of the Timing Subsystem and the Search and Rescue Transponder (SART) of the 22 Galileo FOC Satellites (Technical Responsible of more than 100 flight units) at SSTL.
  o Experience in simulations, studies and testing to assess and validate the end-to-end satellite performance for OHB and ESA.
  o Technical review of specifications, AIT, design descriptions, RFDs, RFWs, NCRs, Operations (TM/TC), FMECA, technical issues, ICDs, test procedures (Vibration, EMC, Thermal Vacuum, EVT) and reports of the whole Timing Subsystem and SART Payload from the initial phase through to the in-orbit commissioning.
  o Support to technical issues and project reviews (PDR, CDR, TRR, DRBs for EM and FMs) on supplier-site (Germany, Switzerland and Italy).
  o Good knowledge of the FOC navigation signal (E1, E5 and E6), signal in space ICD (SISICD) and space segment requirements (SSREQ) from ESA.
  o Security Clearance. Working with Galileo FOC Classified documents and navigation assessments.
  o High experience with managing technically industry projects (Astrium, Selex-Galileo and Spectratime, OHB and ESA).

- **Satellite Communication Engineer at CNES (French Space Agency)**
  Toulouse (France).
  Dec'09-Nov'10

  o Demonstration of Applications of Telecommunications and Network Techniques with Satellites group in the Radiofrequency department.
  o Expertise in satellite communications protocols (DVB-S, DVB-S2, DVB-RCS) and synchronization techniques for satellite terminals.
  o High analytical and research skills.
  o Propose and carry out R&D activities in this field and providing support for '0' Phases, pre-projects and projects.
  o Study the integration of telecoms satellites into new generation networks.
  o Contribute to the promotion and exploitation of the activities through publications in scientific reviews and symposia, technical notes, participation in Technical Expertise Centres and expert networks.

- **System Engineer at Acerca Comunicaciones y Sistemas**
  Málaga (Spain)
  Apr'09-Jul'09

  - Design of the Home Automation of a palace in Doha (Qatar).
  - Common Telecommunications Infrastructure for the automation of household appliances and features through wire, radio communication and infra-red signals with a central controller.
  - International vendors handling.

- **Research Scientist at University of Málaga**
  Málaga (Spain)
  Feb'09-Mar'09

  - Study of Social Networks Sites and implementation in Android (Google's Operative System).

- **System Analyst at Accenture**
  Madrid (Spain) and Bern (Switzerland)
  Oct'07-Oct'08.

  - Communications and High Technology Division.
  - System Analyst in the Migration team during Proposals, Functional design, Technical design, Implementation and Tests for Swisscom CRM project.
  - Bern (Switzerland) – 7 months: Functional design performed on-site at customer facilities.
  - Responsible of one Junior Programmer during the technical design, implementation and tests phases.

EDUCATION

- **Master of Research (MRes/MPhil) in Telecommunications Technologies**
  Telecommunication Engineering School, University of Málaga, Spain.
  Oct'08-Oct'10 (2-year degree)

  - PhD Program: Specialized in mobile and satellite communications.
  - Certificate of Research Proficiency.
  - Final MRes. Thesis (PhD Pre-Thesis): "Optimization of the headers in satellite communications DVB-S2 for conveying IP packets over GSE". (Grade: 8,5/10)

- **Master of Science (MSc) in Telecommunication Engineering**
  Telecommunication Engineering School, University of Málaga, Spain.
  Sept'01-Sept'07 (5-year degree).

  - Main areas: Digital Signal Processing, Digital and Analogue Communications, Electronics, Radiofrequency, Microwaves, Electromagnetism and Optical Communications.
  - Final M.Sc. Thesis: 'Study and implementation of the authentication and encoding algorithms in 3GPP UMTS networks (3G)'. (Grade: 10/10, **Cum Laude**)

PUBLICATIONS

- J. P. Mediano Alameda, P. Gelard, E. Dubois and R. Barco Moreno, "Optimization of the DVB-S2 headers in GSE over DVB-S2", 3rd International ICST Conference on Personal Satellite Services, February 17-18, 2011 – Málaga, Spain.

LANGUAGES

- **Spanish:** Mother tongue.
- **English:** Fluent. CAE (Certificate of Advanced English of Cambridge University). Used to working in international environments. Living currently in the UK.
- **French:** Fluent (Lived in France for one year).

TECHNICAL SKILLS

- **Protocols and standards of communications:** GSM, GPRS, UMTS, LTE, DVB-S, DVB-S2, DVB-RCS.
- **Programming Languages:** C, C++, Matlab, VHDL, Assembler, Java, TCL.
- **Operating Systems:** Linux, MS-DOS, UNIX Shell Scripting, Windows.
- **Office:** Excel, PowerPoint, Word.
- **Specific Tools:** OPNET, Network Simulator (NS), Autocad, DOORS.

EXTRA ACADEMIC TRAINING

- **2013:** Satellite Communications Engineering, University of Surrey (United Kingdom), 1 week.
- **2011:** Spacecraft Design Engineering, University of Surrey (United Kingdom), 1 week.
- **2007:** Management and Business Administration Course, Economics Faculty, Málaga University, 20 hours.
- **2007:** Course about ICT Projects (Telecommunication Common Infrastructures), Official College of Telecommunication Engineers, Málaga (Spain), 20 hours.

ADDITONAL INFORMATION

- Used to working under pressure in demanding environments. Excellent technical, research and communication skills.
- Team leadership skills and customer handling.
- Hard worker and innovative problem-solver.
- Availability to travel.