IVÁN PÉREZ GONZALO

Aerospace and Telecommunication Systems Engineer

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PROFESSIONAL PROFILE

Final-year Double Degree student in Aerospace and Telecommunication Engineering with a versatile technical profile. I combine advanced competencies in RF, avionics, and networks with strong analytical and complex problem-solving abilities. Oriented towards excellence and autonomous learning. Seeking a curricular internship opportunity to contribute value to engineering projects.

EDUCATION

Double Degree in Aerospace Systems & Telecommunication Engineering UPC (EETAC)
Minors: Air Navigation and Telecommunication Systems.

TECHNICAL COMPETENCIES

RF & Microwave Engineering

- Design and simulation of passive circuits, Low Noise Amplifiers (LNA), and Power Amplifiers (PA).
- Smith Chart handling and impedance matching in transmission lines.
- Instrumentation: Use of Vector Network Analyzers (VNA) and Spectrum Analyzers.
- Electromagnetic simulation software (ADS/CST).

Avionics & Navigation Systems

- Aeronautical communication protocols: ARINC 429, AFDX, and military buses (MIL-STD).
- Navigation Systems: GNSS (GPS/Galileo), VOR, ILS, DME, and Inertial Navigation.
- Cockpit systems integration (Glass Cockpit, FMS, Autopilot).

Aerodynamics & Flight Operations

- Flight mechanics and performance calculation (take-off, cruise, landing).
- Flight planning, EU-OPS regulations, and Air Traffic Management (ATM/Safety).

Telematics Networks

- TCP/IP architecture, routing (OSPF, BGP), and LAN/VLAN network design.
- Software Defined Radio (SDR): Implementation of transmission chains in software (GNU Radio, Python).
- Network cybersecurity and basic cryptography.

TECHNICAL SKILLS

Eng. Software	ADS, MATLAB/Simulink, SolidWorks/CATIA, Radio Mobile, WinIQ, Intel Quartus Prime, Proteus, VcDemo.
Programming	Python, C/C++/C#, SQL, Kotlin, Java, Android Studio.
Systems/Tools	Linux, GitHub, Excel. **Languages:** Spanish, Catalan, English.

KEY ACADEMIC PROJECTS

- **LNA Amplifier & Microwave Filter Design:** Using ADS software, optimizing noise figure and gain for a communications receiver.
- **Comprehensive Network Planning:** Geographic study and radio equipment selection, validating coverage and interference in different environments using Radio Mobile software.
- **Incompressible Flow Dynamics:** Study of inviscid flow around bodies of different shapes.
- **Mission Planning & ATM:** Simulation of capacity and demand scenarios in airspace sectors, applying queuing theory models for delay optimization.

OTHER INFORMATION

- Driving License (Class B).