



ABEL GARCIA CASTELLANO

IGN-ES SCIENTIFIC PROJECT OFFICER FOR RAEGE-AZ

DESCRIPTION

As telecommunication engineer, Abel likes everything related to technology, especially radio frequency systems. That's why he had worked in radioastronomy, where the RF technology development is very significant. Currently, he is working for RAEGE-AZ, developing work in receivers, VLBI backends and servomechanisms areas.

CONTACT DETAILS

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EDUCATION

Universidad de Las Palmas de Gran Canaria
09/2010 -06/2016

Abel has master's degree in Telecommunication Engineering and Telecommunication Systems specialty. He had several courses in antennas, microwaves, RF communication electronics, satellite, mobile systems, and signal processing. During his studies he worked at the Technological Development and Innovation in Communications Institute (IDeTIC), where he developed his master's thesis "Design of a modular prototype for the electronic configuration of an antenna array in C-band". It consisted in choosing the topology of the array and its RF components, as well as the design of evaluation boards for its measurement.

RAEGE JOB SUMMARY

IGN-ES / RAEGE-AZ – Scientific Project Officer
03/2021 – Current

Since 2016, Abel started to be part of RAEGE project, working at Yebes Observatory, where he acquired some knowledge in geodetic VLBI. He is currently working at RAEGE Station in Santa Maria island, where his functions are related to antenna servomechanisms, receiver chain (frontend and backend) and geodetic VLBI observations operation.

SKILLS

- Programming Languages: Java, Python, C/C++, Matlab.
 - RF measurement instruments operation: Noise figure meters, vector network analyzers, spectrum analyzers, oscilloscopes.
 - RF Simulation Software: ADS
 - Antenna control systems: Field System, ALMA Common System
 - Cryogenic receivers design and measurement
 - Cryogenic low-noise amplifiers design and measurement
 - VLBI backends operation: DBBC, RDBE
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