

# **Roger Gonzalez Sedano**

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#### WORK EXPERIENCE

**Ⅲ KTH** – STOCKHOLM, SWEDEN

**RESEARCH INTERN** - 24/08/2024 - 31/05/2025

MSc degree project candidate and Erasmus exchange student in the Communication Systems Department, working on mathematical models of near-field 6G communications, with a focus on redefining the boundary conditions between the near field and far field.

III NANONETWORKING CENTER IN CATALONIA (N3CAT) – BARCELONA, SPAIN

**RESEARCH INTERN** - 01/09/2023 - 30/06/2024

Antenna design and channel characterization for Wireless Network-on-Chip (WNoC) using full-wave simulators.

IDNEO - MOLLET DEL VALLES, SPAIN

HARDWARE ENGINEER INTERN - 01/04/2022 - 30/07/2022

Automotive hardware design, analysis and testing.

**ENGI-ON AUTOMATICA** – MOLLET DEL VALLES, SPAIN

**TECHNICAL APPRENTICE** - 01/07/2021 - 14/09/2021

Development of computer vision software for textile defect detection.

#### EDUCATION AND TRAINING

01/09/2023 - 22/06/2025 Barcelona, Spain

MASTER'S DEGREE IN ADVANCED TELECOMMUNICATION TECHNOLOGIES Universitat Politecnica de Catalunya

A Master's focused on wireless communications and AI for multimedia processing.

01/09/2018 - 31/01/2023 Barcelona, Spain

**BACHELOR'S DEGREE IN TELECOMMUNICATIONS TECHNOLOGIES AND SERVICES ENGINEERING** Universitat Politecnica de Catalunya

Major in telecommunications systems, with a focus on signal processing, electromagnetism and radiocommunications systems.

Thesis Planar antenna design and channel modeling for chip-scale communications

#### PROJECTS

CURRENT

Namaqua Communtity Network - International cooperation project in rural Namibia

Since March 2025, I have been volunteering on an international cooperation project in collaboration with Shoot4Change, Foundawtion, and AUCOOP. The project's objective is to establish a Community Network, replicating the Hahatay Community Network model, to provide connectivity and local services to the Namaqua Kalahari Children's Home in rural Namibia, which will host children at high risk of abuse and poverty.

CURRENT

Hahatay Community Network - International cooperation project in rural Senegal

Since March 2022, I have been volunteering on an international cooperation project in collaboration with Hahatay's NGO and AUCOOP. The objective of the project is to establish a Community Network by employing 5G routers with OpenWRT's Open-Source firmware, and deploying a network control layer with OpenWisp and Zabbix Open-Source software to enable the inhabitants of Gandiol, Senegal, to connect to the internet and access private services, such as a self-hosted NextCloud server.

Link hahatay.network

### **Challenge Based Innovation participant**

A programme run by CERN, where I formed part of a multidisciplinary team with MBA and design students (from ESADE and IED, respectively) and developed a disruptive innovation project with social purpose related to air quality and sustainable mobility.

## LANGUAGE SKILLS

Mother tongue(s): **CATALAN** | **SPANISH** 

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	C1	C1	C1	C1	C1

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user