

Education:

Universidad Pontificia de Comillas, ICAI
 Master's degree in Telecommunication Engineering (MSc)
 2024 - 2026

Universidad Pontificia de Comillas, ICAI
 Bachelor's degree in engineering in Telecommunications Technologies
 2020 - 2024 GPA: 7.94/10 (Spain)

The University of Texas at Austin
Department of Electrical and Computer Engineering
 Exchange Program: August 2023 – May 2024
 Senior Design Project Mentor: Dr. Gustavo de Veciana
 GPA: 3.8522

Coursework:

Fundamentals of telematic systems, Communication Systems, Digital Systems I, Digital Systems II, Object Oriented Programming, Signals and Systems, Algorithms, Computer Network Architecture, Computer Network Technologies, Digital Signal Processing, Microprocessors, Software Engineering, Electromagnetic Waves, Statistics, Statistics II, Digital Image Processing, Power Systems Engineering.

Experience:

08/24 – Instituto de Investigación Tecnológica Madrid, Spain
Research Assistant

- Research on the use of autoencoders and diffusion in time series forecasting.

06/23 – 08/23 Tower Consultores Madrid, Spain
Business Intelligence Intern

- Elaborated reports based on the company financial and performance data to aid in decision making.
- Developed scripts to analyze internal data.

09/22 – 05/23 Universidad Pontificia de Comillas, ICAI Madrid, Spain
Collaborator Student

- Managed Structured Databases
- Conducted a cybersecurity audit on the university international website.

Skills:

Programming Languages: Java, Python, C, JavaScript, MatLAB.
 Design automation tools and languages: VHDL, ModelSim, LTSpice, Qucs
 Test and measurements: Signal generators, oscilloscopes, spectrum analyzers
 Machine Learning Frameworks: Pytorch, Tensorflow, Keras, ONNX
 Network Tools: Cisco Packet Tracer, Cisco CLI, Mininet
 Databases: SQL, MongoDB
 Languages: English, Spanish, Catalan.

Research & Projects:

08/24 – Current Use of Autoencoders in Time series forecasting
 Co-Advised by Dr. Mario Castro and Dr. Simón Rodríguez

08/23 – 06/24 Network optimization via the use of Reinforcement Learning.
 Advised by Dr. Amy Zhang

10/23 – 12/23 Diffusion Model for Movie Poster Generation
 Implemented a diffusion model from scratch.

02/24 Contributions to Flower Framework.