Pablo Suárez

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About me

I am a Telecommunications engineer based in Madrid, actively seeking opportunities in the dynamic field of Data Science and AI. My goal is to further my practical experience in the industry and cultivate professional relationships. My passion for technology and science, coupled with my problem-solving skills, drives my enthusiasm for tackling challenges and exploring innovative solutions.

In my thesis, I specialized in Deep Learning within the realm of Computer Vision. I successfully deployed a CNN to detect defects in industrial components and welds, showcasing my strong grasp of this complex technology. I am also an avid language learner, constantly expanding my linguistic repertoire during my leisure time. Drawing serves as a therapeutic outlet for me, providing a fresh perspective on problem-solving and challenges.

Recently, I completed a comprehensive Deep Learning specialization on Coursera, where I gained expertise in developing robust and efficient computing models for Machine Learning. Currently, I am pursuing a Data Science master's program to further refine my programming skills and explore advanced techniques for data analysis and model creation. I am a quick learner who readily adapts to new workflows and I am eager to apply my knowledge in a more oriented AI setting.

In my most recent role as an O-RAN intern at Telefónica, I swiftly transitioned to the position of Research and Development Engineer in the O-RAN department. I successfully set up a server, configuring it for our team's Python development work using frameworks such as TensorFlow and Keras. This endeavor required me to delve into parallel computing concepts, including CUDA, and manage IP network allocations within the VPN for server connectivity. Additionally, I installed the operating system via the IDRAC port and set up essential development environments like Docker, JupyterLab, TensorFlow, Keras, and Sionna.

My contribution to ongoing projects involving AI and 6G technologies has been substantial according to my age. Leveraging Python, TensorFlow, and Keras, I am actively involved in designing wireless communication scenarios to enhance wireless channels through AI in the RAN.

Education

2014–2018 **High School Diploma**, *Sagrado Corazón Reparadoras High school*, Majadahonda, Madrid

2018–2023 **Bachelor of Science in Electronics and Telecommunications Engineering**, *Complutense University of Madrid*, Madrid
Major: Telecommunications | Minors: Electronics, Deep Learning & Antennas

2021–2022 **Electrical and Electronics Engineering**, *École Polytechnique Fédérale de Lausanne*, Lausanne, Switzerland
Exchange student, master and Bachelor courses

2022–currently **Deep Learning**, *Coursera, Remotely*, Artificial Intelligence, Specialisation in Deep Learning and Neural Networks
Logistic Regression | Gradient Descent | Machine Learning | Neural Network Design | Python

2023–currently **M.Sc. Data Science**, *Universitat Oberta de Catalunya*
Data mining | Programming for Data Science | Artificial Intelligence | Machine Learning

Experience

Volunteering

12/2016-03/2017 **Academic aid and private classes**, *Sagrado Corazón Reparadoras School*, Majadahonda, Autonomous Community of Madrid, Tutoring and academic support to primary school students with special needs (unpaid)

Work Experience

02/2022–07/2022 **Technical Engineering**, *EPFL Rocket Team*, Lausanne, Switzerland, Antenna and Microwave Engineering
Project: Design of a circularly Polarized Patch Antenna in the band of 868-869 MHz for the Ground team

02/2023–04/2023 **Internship**, *Instituto Geográfico Nacional de España y O.A. CNIG*, Madrid, Spain, Python Programming
Project: Extraction of attributes for characterization and categorization of a seismic record. The extracted attributes can be divided into three categories: purely statistical description of the amplitude of the register, spectral description and polarity. The set of these features can serve as training for machine learning methods that allow the classification of events.

04/2023–08/2023 **Internship**, *Telefónica*, Madrid, Spain
RAN Innovation - Analyst intern. Open RAN and New Radio solutions team based in Madrid (Spain) within the Global Access area of the Chief Technology Office (GCTIO) of Telefónica.

08/2023–today **O-RAN Analyst & New Radio Solutions**, *Telefónica R&D*, Madrid, Spain
RAN Innovation. Open RAN and New Radio solutions team based in Madrid (Spain) within the Global Access area of the Chief Technology Office (GCTIO) of Telefónica.
Key activities:
- Massive MIMO simulations with AI/ML simulators such as Sionna (Python).
- Use of AI modeled databases for MIMO simulations.
- Analysis of new technical enablers in 6G.
- Analysis of new capabilities in RAN related to different 3GPP releases and O-RAN specifications.
- Support on RAN activities in lab (logistics, setup, test plans)

Computer Skills

Coding	C, C++, Python, R, Matlab, LaTeX, Vivado HLS, Assembly language, Bash, TensorFlow, Matplotlib, Obspy, Keras, Cuda, NumPy, Pandas, Sionna, Pytorch, PIL, Kubernetes, Docker
Microsoft Office	Word, Excel, Powerpoint, Publisher
Simulators	PSPICE, Ansys HFSS, Microwave Office, LTSPice, GNU Radio, Microwind, Xilinx
Digital Platforms	Slack, GitHub, Linkedln, Infojobs, Monday, Stack Overflow, Notion

Languages

- Spanish (mother tongue)
- English (C1 level)
- French (B2-C1 level)
- Catalan (B2 level)

Certifications

09/2022–11/2023 **Deep Learning specialization**, *Coursera, Remotely*, Madrid, Spain
(full certificate here)
Completed courses:
- Deep Learning and Neural Networks.
- Improving Deep Neural Networks: Hyperparameter Tuning, Regularization and Optimization.
- Structuring Machine Learning Projects.
- Convolutional Neural Networks.
- Sequence Models.

02/2023–today **Supervised Machine Learning specialization**, *Stanford University and Coursera, remotely*, Madrid, Spain.
Completed courses:
- Regression and Classification (certificate)

09/2023–today **Data Science Specialization**, *IBM and Coursera, remotely*, Madrid, Spain.
Completed courses:
- What is Data Science (certificate)