



Miguel Carpintero

PhD on Electrical Engineering

Email miguelcarpintero93@gmail.com

Phone **+34 608 189112**

Location **Santander, SPAIN**

Github [elcarpins](#)

Publications [Google Scholar](#)



PROFILE

An adaptable and enthusiastic engineer trained in machine learning and project management. Holds an MSc in Industrial Engineering and a PhD in Electrical Engineering at University Carlos III of Madrid. Project lead for various renewable energy studies related to data science in collaboration with international colleagues at Spain, the UK and Australia. Highly interested in working closely with different types of customers and technical projects.



WORK EXPERIENCE

Researcher and lecturer / Feb 17 - Apr 21

University Carlos III of Madrid (UC3M) - Madrid, SPAIN

- Evaluated the implementation of novel machine learning algorithms and techniques in relation to renewable electrical generation systems. Demonstrated technical, programming, and analytical skills.
- Collaborated with colleagues in Spain, UK, USA or Australia in 8 data science projects with different work streams. Enhanced leadership, teamwork, and problem-solving skills; analysed business impact and proposed real and tangible solutions for the community.
- Lectured undergraduate and postgraduate students in electrical engineering (bilingual education); supervised MSc dissertations; and mentored international students from different degrees (Q1 results on performance assessment).

MATLAB Python Homer Pro AutoCAD LaTeX

Data Science Project Lead / Sep 19 - Sep 20

Fundación Iberdrola - Madrid, SPAIN - Glasgow, UK

- Project (ID: [2019/00370/001](#)) granted by Fundación Iberdrola with 20.000€ to develop Machine Learning techniques for fault detection.
- Managed a small, diverse, and interdisciplinary team from Spain and the UK. Developed an understanding of teamwork dynamics, time and project management, and budgeting.

MATLAB Python R



SKILLS

Languages: Spanish (Native), English (Advanced C1)

Python tools: TensorFlow, NumPy, Pandas, Scikit, Spark

Other: Machine Learning and AI, Data Science, Azure, Google Cloud Platform



EDUCATION

PhD on Electrical Engineering / 2017 - 2021

University Carlos III of Madrid (UC3M) - Madrid, SPAIN

Thesis: Improved modelling of microgrid distributed energy resources with machine learning algorithms.

MSc on Industrial Engineering / 2015 - 2017

University Carlos III of Madrid (UC3M) - Madrid, SPAIN

BSc on Industrial Technologies / 2011 - 2015

University of Cantabria (UC) - Santander, SPAIN



CERTIFICATES

Machine Learning & Artificial Intelligence

Massachusetts Institute of Technology (MIT) - Boston, USA / 2019 - 2020

AGILE Project Management Practitioner

University of Westminster - London, UK / Nov 2016

PRINCE2 Project Management Practitioner

University of Westminster - London, UK / Jul 2016



CURRENT SIDE PROJECT

- **Volunteer** – Red Cross, Cantabria (Spain), 2021. – Participating in several projects related to climate change and education success of primary and high school students.



AWARDS

- Best Research Paper September Highlight by IET Renewable Power Generation Journal (2020).
- Poster Award by ABB Technical Committee at 20th IEEE International Conference (2020).