

There is a Ph.D. student position available at the University Carlos III of Madrid (Spain), at the Department of Electrical Engineering.

Topics: Machine learning, battery testing, modeling and aging estimation.

Expected start date: anytime between June and July 2023.

Duration: up to 4 years.

Funding: the position is funded. Salary increases per year, with an average of 21 000€.

Description: the candidate will participate in a publicly funded research project and in a research project with a leading company in the transportation sector. The candidate will perform battery testing, modeling and application of machine learning algorithms to develop predictive aging models. It can include incorporating them to power system and transportation application models.

Academic environment: the student will join the REDES research team, working along other students and professors. The student will be able to benefit from attending international conferences, interacting with engineers working at the transportation company and other academic researchers. It is an excellent setting for those students looking to bridge academic and industrial spheres. Moreover, the University Carlos III is located in Leganés, a mere 20 minutes away from Madrid, which a bustling and welcoming European capital.

Mandatory requirements:

- **1.** To have graduated from a M.Sc. program in any related topic to electrical engineering, mechanical engineering, computer science, etc.
- **2.** For candidates that are not Spanish-speaking, a minimum score of 95 in the TOEFL exam or comparable English exam.
- **3.** Experience coding in Python.

Desirable experience in one or several of the following topics:

- Communication platform use and/or design for digital twins.
- Machine learning.
- Knowledge in battery modeling and/or testing.
- Previous experience in a laboratory environment.

Application package to be sent to lucia.gauchia@uc3m.es :

- 1. Academic records in English or Spanish
- **2.** CV
- 3. TOELF scores for non-Spanish speaking

Application timeline and process: applications will be accepted until the position is covered. Those candidates that better match this call will be interviewed online.