

Current Opening

ARQUIMEA RESEARCH CENTER is hiring a **Research Engineer** to be located in our office in San Cristóbal de La Laguna (Tenerife- Canary Islands-). We are looking for someone with knowledge in the field of electric motors and motor control algorithms. Our main goal is to design highly optimised electric motors for specific applications where efficiency and energy density are critical. Understanding how to use the existing resources, planning accordingly and adapting to an ever-changing environment are key aspects of the role and candidate. The successful candidate can expect to be working on several layers, from the motor concept generation to the detailed design, prototyping, control and characterisation. You would work as part of a model-based development process, where analysis and simulation lead way to prototypes and tests for validation and physical results.

We are a highly multidisciplinary center, the successful candidate must thrive in such environment. We encourage you to apply if you enjoy totally random conversations about several topics apart from robotics, such as space, propulsion, quantum physics, lab equipment and testing, disruptive tech... anything cool and nerdy, really.

Tasks to be performed:

- Definition and evaluation of Commercial Motors Control Algorithms/Techniques.
- Determination/optimisation of electric motor specs for a set of requirements of operation.
- Modelling and simulation of electric motors and shielding. This model might include different physics, such as electromagnetics, thermals or mechanics. Understand and manage uncertainty: picking the right tools to perform analyses and create models, in order to define appropriate requirements.
- Knowledge about the different BLDC topologies, materials and critical design parameters
- Read and understand relevant research papers
- Participate in agile planning meetings and contribute to the agile-based work management tools.
- Contribute to the internal and external documentation of the Project.

Required skills, experience and candidate profile:

- Studies in the field of Electrical/Electronics/Control/Robotics Engineering or relevant PhD or Masters degree.

- Strong knowledge of Motor design and Motor Control Algorithms. Experience with modelling tools (ANSYS, Matlab, Simulink/Simscape are preferable, but not a must if you are happy to learn).
- You must enjoy working in a research-oriented environment.
- Basic understanding of electronics and software, and its role/impact in complex systems.
- Data-driven, analytical mindset. Open to challenges.
- Detail-oriented person, with experience working in agile development environments, specially when focused to product hardware development.
- We are also looking for a good person, someone who thrives working in multidisciplinary and ever-changing environments.
- Proficient in English
- The candidate must be eligible to work in the EU.
- And the easiest one, you must be willing to live in the Canary Islands.

IMPORTANT. Please, only apply if you have a valid working visa for Spain, and you are willing to move to Tenerife (Canary Islands, SPAIN).

To apply, please visit [Arquimea.com/careers/](https://arquimea.com/careers/)