

Mechatronics engineer

Job description

As a mechatronics engineer at AquaBattery, you will work with a team of scientists, engineers, and developers on developing a battery that works based on water and salt. You have strong software skills, as well as electronics skills allowing you to work together with a multidisciplinary team of engineers and researchers. You help the team by designing, building, and integrating hard- and software which brings our innovative membrane stacks to life in a smart, reliable, and usable fashion. You will be working on the control systems for our flagship battery product that is under development, as well as the automation of research setups for the research & development team. You will collaborate on the selection of instrumentation (sensors, valves, pumps etc.) and ensure that they work seamlessly with the control interfaces you create, which are easy to operate for our researchers and clients alike. Your colleagues will know you as the person creating the brains behind the machines. Together with the AquaBattery team, you will work out our technical challenges and integrate them into our final product.

What you'll be doing

- Create and maintain a software system that enable a user to operate the battery system. This includes sensors, GUI, and controllers.
- Create and maintain systems for quality control and diagnostics of newly built membrane stacks and lab setups.
- Collaborating with the engineering team to make prototypes and tests of designs
- Collaborating with the R&D team to design and make experimental setups
- Selection and integration of electronics and auxiliary equipment (sensors, pumps, valves).
- Manage the company's codebase, enabling collaboration in software.

Function requirements

We expect from you:

- HBO/WO degree in mechatronics, electrical engineering, or mechanical engineering (with an affinity for software/electronics). Or HBO/WO degree in computer science (with an affinity for electronics) or similar.
- Ability to manage the codebase of a software project, both when working alone as well as a small team.
- Experience in creating hardware-in-the-loop software, machine controllers and similar.
- Strong skills in electronics prototyping, particularly in their software (Arduino, Raspberry Pi)
- Experience with PLC programming
- Ability to interact efficiently with suppliers and development partners
- (Near-) fluent in English, both spoken and written

The following is considered a plus:

- >2 years of industry experience
- Experience in PCB design (Eagle/KiCAD)



- Experience setting up and handling critical equipment and software for safety monitoring of the product and workshop
- Experience managing projects with GitHub
- Experience applying your skills to a process-engineering project/company.
- Proficient in Dutch, both spoken and written

What you can expect

- Be part of a fast-growing organization, with the mission to accelerate the transition of energy to renewables.
- Highly enthusiastic and motivated colleagues, looking to make a green, clean, real-world impact.
- Have variety in your daily activities through active knowledge sharing, presentations, and collaboration.
- Work-life balance
- Open environment to express your opinion and share new ideas
- Work in an English environment with colleagues of different nationalities

About our company

AquaBattery is a deep-tech company based in the Netherlands working to revolutionize green energy storage. Our mission is to cut energy bills and catalyze the development and uptake of renewable energy technologies across the EU and beyond. We recognize that renewable energy is only part of the solution, and only through pairing it with cheap and scalable energy storage solutions can truly make an impact. AquaBattery was founded in Leiden in 2014 to commercialize the world's cleanest energy storage solution. We have won a host of prestigious international awards, such as Herman Wijffels Innovation Award (2016), Accenture Innovation Award - Circular Economy (2017) and the Postcode Lottery Green Challenge (2018). Our team is composed of leading experts in water membrane technologies and the energy storage industry, combined with the leadership of visionary founders. We are supported by a network of exceptional partners, such as Climate-KIC, TU Delft, The Green Village Delft, and technical experts at Imperial College London, REDStack, and Wetsus. We have also secured industrial partners such as Compass and TBI that are able to support with electronics and installation of systems. Our technology has been successfully demonstrated through a number of prominent installations in the Netherlands and in Italy and has reached TRL 6, we are now expanding our company.

Location / Hours

Leiderdorp / Full-time: 40 hours per week

Contact details / website

info@aquabattery.nl / www.aquabattery.nl/

Please note that acquisition as a result of this vacancy is not appreciated.