Embedded Junior Firmware Engineer Bachelor/Master

Are you interested in working for an innovative and growing business?
Are you interested in developing lithium-ion batteries for different applications?
Then we are looking for you.

Cleantron

Cleantron develops and produces lithium batteries close to Amsterdam in Nieuw Vennep. Cleantron batteries are used in a variety of markets, at home and abroad. Think of electric vehicles such as special e-Bikes and e-Scooters, Light Electric Vehicles, Automatic Guided Vehicles (AGV's), Automotive applications and Construction Equipment.

We put the quality of our products centrally and in order to guarantee this, we continuously work on improving our product designs and production processes.

Good battery design is very important for manufacturability, safety and battery life. Cleantron is developing batteries for new applications where these aspects are key.

The embedded Battery Management System (BMS), together with the Lithium-ion Cells, form the heart of a Cleantron Battery and guarantees the safety and service life of the Battery. The BMS ensures, among other things, protection against many extreme conditions (over-voltage, under-voltage, over-current, etc.). In addition, various important data for the customer are collected and calculated, such as the "State of Charge" and the condition of the battery. Finally, based on customer-specific protocols and interfaces, the BMS provides communication between the battery and the battery application. This often must be coordinated with the motor controller or VCU of the vehicle or application so that in an extreme condition (for the battery) the vehicle stops safely or that in an imminent extreme condition the motor controller regulates back in time to prevent the battery from switching off.

Tasks Embedded Junior Firmware Engineer

The Engineer works on the BMS Firmware design or parts thereof. He or she works closely in a team to ensure alignment with the final application. The Engineer also sets up and performs the validation tests on developed products. You will be working in accordance with the V-model.

The Junior Firmware engineer is part of the electrical teams that consists of Junior and Senior Hardware, Firmware and Test engineers. You will be working in cross-function products developments teams that also include other disciplines like Mechanical Engineers and Production Engineering.
The Team consists out of hardware and software engineers. In addition, Cleantron works together with Universities, Colleges and a number of engineering partners. An objective-oriented work attitude and team spirit are therefore important.

Education

Bachelor or Master in Electrical Engineering, with a specialization in Firmware development.

Relevant skills

- Firmware Development in C
- You are familiar with the V-model
- An understanding of hardware
- A good understanding of Functional Safety (ISO 26262 and ISO 61508) is a benefit
- Experience with validation of Embedded Systems
- Able to make and record structured problem analysis
- 0 to 10 years of work experience
- You master the English language

We offer

- Dynamic international working environment in an innovative and growing company, with an enthusiastic team, and room for personal input. We also offer room for further development of your skills (on the job or by offering specific training).
- Full-time appointment (38 hours), however part-time is also negotiable.
- A competitive salary, depending on education and experience.
- Personal training options

Interested?

If you recognize yourself in the profile above, apply by sending your CV and motivation letter to Padina Basirat (padina.basirat@cleantron.nl). More information about Cleantron can be found at www.cleantron.nl, for questions about the vacancy also feel free to contact Padina Basirat.