

## **(Cryo)Electrical Engineer (m/w/x)**

### **Develop new diagnostic tools that will enable the quantum revolution at a fast-growing startup**

Quantum computing will allow the world to tackle problems that are currently impossible to solve. But quantum chips are complex and when they do not work as well as they should (and they often don't), there is no way to find out why, which component failed, and how to improve the production processes. This is one of the major road-blocks towards scaling quantum chips. QuantaMap's novel microscope, based on SQUID-on-tip, will provide a solution to this problem and therefore will help enable the quantum revolution.

As an Cryo Electrical Engineer you will play a crucial role in the development and market introduction of our technologies. In particular, you will be responsible for upgrading our microscope prototype with cryogenic filters and amplifiers as well as superconducting circuits. You will be doing this together with the QuantaMap team and other industrial and academic partners in a subsidized project. You will use the microscope to understand the generated signals in detail and will then use this knowledge to improve and upgrade the QuantaMap microscope system together with the design team. As such, you will become a key part of our small, but fast-growing company, and you will join us during a very exciting time: We are currently assembling our commercial prototype (target operation is Q1 2025) and are talking to first customers. Your main responsibilities will be technical, but because of the early stage of the company, we explicitly welcome applicants with interest in developing their leadership and management skills.

### **Impact of the role:**

Our company is developing one-of-its-kind technology that can solve one of the most important problems in the quantum industry. You will be a key member of the team developing this technology, and your talent and hard work will have an impact on the quantum industry as a whole. You will be part of a small, dynamic team, where we help each other to thrive, and work towards our common goals. We believe in giving ownership and responsibility in this task to all team members.

### **Ideal Candidate**

We will support you to become a successful Cryo Electrical Engineer at QuantaMap, and ideally you start with:

- appetite to take responsibility and make an impact in a small, growing business,
- fun with and interest to work in a team with external project partners,
- demonstrated strong dedication and perseverance, consistently striving for excellence and motivating others to achieve shared goals.
- hands-on experience in using and building or upgrading electronics for complex mechatronic systems (ideally electronics at cryogenic temperatures),
- signal processing and data analysis

Please do highlight other experience such as:

- measurements using high-frequency (RF) signals
- expertise and fabrication or characterization of quantum chips
- control engineering
- experience (or a PhD) gained within a (hardware-centered) research and development or a production environment

This role requires you to be an independent problem solver, to make things work, to have grit and a passion for building things. You'll be working closely with a small and very supportive team, so close communication and shared team goals will be part of daily life.

In a dynamic start-up, the environment and goals can change fast and you'll be someone who enjoys this. In parallel though, your work will be of high integrity and completed with scientific rigour.

Please do not hesitate to apply if you think this could be the right opportunity for you, even if you do not tick all of the boxes.

### **What we have to offer**

We offer you a challenging position with ample opportunity to grow. You join a growing company, so you can have a key role in shaping the company early on.

You will join a young and diverse team extremely motivated to solve hard problems that do not have solutions yet. We believe that our technology will have major impact in the quantum industry and will have applications in different fields in science and emerging technology as well. You will contribute to this revolution and get to work with world-leading experts within a field that is on top of the strategic agendas of the world's most innovative nations and to collaborate with the world's leading quantum chip producers and scientists.

At Quantamap, we are committed to diversity and to creating an open and inclusive environment where everyone can speak up, learn and thrive. We explicitly welcome applicants from all backgrounds and identities We explicitly welcome applicants from all backgrounds and identities to further our inclusive workplace. We value mentorship, trust, kindness, and ambition and offer personal development courses (via our incubator) and a dedicated mentor.

### **How to apply**

Please send us your CV and a short message why you want to join QuantaMap to [join-us@quantamap.nl](mailto:join-us@quantamap.nl) and we will come back to you with suggestions for a date of a first interview.

In case you have any questions, don't hesitate to reach out to our CEO, Johannes Jobst ([johannes@quantamap.eu](mailto:johannes@quantamap.eu), +31649588920).