Software Developer/Engineer (m/w/d)

(100% Employment)

[Qnami](#) develops fundamental new technology using quantum mechanics. The control and measurement of the state of a single electron enables us to measure what could never be measured before. We call this quantum sensing and are enthusiastically developing this technique to improve people's lives and the world.

Qnami is a magnet for talents looking to join the quantum revolution at the pulse. Multicultural, open-minded, and highly skilled, we come from all over the world and have a deep passion for our work. Both business and scientific minded, each of us contributes with our unique skills plus a strong work ethic and enthusiastic spirit – because we believe in what we do. We value diversity and have created a self-managed, flexible team culture that supports employees' development and enables us to live a healthy, well-balanced life.

We develop and commercialize applications of [NV Quantum Sensors](#) (Nitrogen-Vacancy), leveraging proprietary technology and unique know-how. Our first commercial product, the Qnami [ProteusQ](#) is a complete quantum microscope system. It is the first scanning NV microscope for analysis of magnetic materials at atomic-scale and features state-of-the-art electronics and software. The flexible design allows for future adjustments and scaling, expansion, and functionality additions. With our new product line, the Qnami ProteusQ-LT, we aim to extend its capabilities towards cryogenic temperature.

To support our ongoing product developments of the Qnami ProteusQ and the Qnami ProteusQ-LT, we are seeking a

Software Developer/Engineer (m/w/d)

As a Software Developer/Engineer, you will work with all layers of our code. Your focus will be to implement new functionalities and modes for the Qnami ProteusQ and Qnami ProteusQ-LT. Our primary stack is Python 3, PyQt, Jupyter Notebook. You will work with a variety of low-level communication protocols to manage the connected hardware (including C/C++ libraries) and develop simulation modules of the actual hardware.

In this position, your responsibilities will include:

- Implementing efficient operation logic in Python for quantum sensing applications within the PyQt and our own open-source LabQ framework derived from [Qudi](#)
- Maintaining and shaping a coherent codebase between Qnami ProteusQ and Qnami ProteusQ-LT and future products
- Crafting and improving of intuitive graphical user interfaces in PyQt to operate our cutting-edge quantum microscope
- Liaising with your colleagues to transfer quantum physics into real life applications
- Applying best practices and standard operating procedures in the development process

Qnami offers you a great working environment and a chance to learn and grow:

- Obtain an in-depth experience in a pioneering deep-tech quantum company
- Develop an understanding of state-of-the-art quantum science with diamond-based materials and build-up expertise in scanning probe microscopy
- Be a core part of a motivated and energetic startup team who values both scientific free climbing and human connection
- Enjoy a great remote team environment, good connectivity, and infrastructure
- Interact with and experience quantum technology from wherever you are based

You are a passionate and creative physicist/engineer/computer scientist. You value work in a multi-disciplinary team, like to share ideas and tackle complex challenges. Your qualifications include:

- A Master's degree in Computer Science/Electrical Engineering (or equivalent)
- 1-3 years working experience in a remote working situation
- Solid python 3.8 knowledge
- Hands-on experience with the PyQt/Qt graphical framework (knowledge in C/C++ is an advantage)
- Proven ability to develop and maintain structured, modular code by using standard development tools and release processes (such as Git, CI/CD, unit tests, etc.)
- Passion for organization, testing and comprehensibility
- Ability to work alone as well as a part of a team; ability to learn independently
- Strong communication skills, both written and oral
- Experience in debugging software and systems as well as the ability to analyze, evaluate, and solve problems
- Self-starter, tech savvy and proficient in applied mathematics
- Collaborative, self-motivated, solutions oriented, creative thinker
- Contributions to open-source projects is well seen as a plus
- Knowledge in quantum physics is a plus

You will have responsibilities and a direct contribution to the growth of the company and the emergence of a quantum industry 1.0. Your salary will be based on your experience and your role will be executed from wherever you are situated in Germany.

You will be employed by our subsidiary Qnami GmbH in Germany. Through this strategic expansion Qnami will be closer to collaboration partners, thought leaders and talent in the evolving field of quantum sensing.

Qnami was founded in 2017 in Basel, at the cross-roads of Switzerland, Germany and France, and builds on the work of Professor Patrick Maletinsky from the University of Basel. We explore implementation and application of quantum nitrogen-vacancy (NV) color center in diamond for high-performance sensing devices.

Please send your application (CV, motivation letter and examples of previous projects in English) to jobs@qnami.ch.