

# **Application Scientist**

### Quantum Computing Solutions

QPerfect is an ambitious DeepTech quantum computing startup, spun-off from the prestigious European Centre for Quantum Sciences (CESQ) in Strasbourg. Our primary goal is to develop a Quantum Logic Unit (QLU), a full hardware and software system to control quantum computers and unlock the power of fault-tolerant quantum computing. Our first product, MIMIQ, is a high-performance quantum circuit simulation SaaS platform that serves both the quantum community and as the foundational software layer for our QLU.

We are seeking a highly motivated Application Scientist to join our nascent Product Team. You will be the crucial technical bridge between our customers and our development teams, championing our quantum simulation platform and shaping the future of our products.

## Your Mission

As an Application Scientist, you will be instrumental in driving the adoption and evolution of our technology. You will:

- Serve as the main scientific liaison for MIMIQ users and partners, understanding their research goals to ensure their success with our platform.
- Develop compelling use cases by researching and implementing quantum algorithms and applications on MIMIQ that demonstrate practical value and scientific impact.
- Shape our product roadmap by translating user feedback into concrete requirements for MIMIQ and the architectural design of the QLU.
- Provide expert technical support and guidance to users, helping them optimize their quantum simulations.
- Collaborate across teams, working seamlessly with software and quantum engineers to integrate user needs into new features and improvements.
- Disseminate knowledge by creating high-quality technical documentation, tutorials, white papers, and contributing to scientific publications.



• Stay at the forefront of the field, maintaining expertise in quantum algorithms, hardware, and relevant application domains.

## Your Profile

#### Must-Have:

- An MSc or PhD in Quantum Computing, Physics, Computer Science, or a related field.
- A deep and practical understanding of quantum computing algorithms and numerical simulation techniques.
- Hands-on proficiency in Python and experience with standard quantum software libraries (e.g., MIMIQ, Qiskit, Cirq).
- Exceptional communication skills, with a proven ability to explain complex scientific concepts to diverse technical and non-technical audiences.
- A client-oriented, problem-solving mindset with a keen interest in the practical application of quantum solutions.
- Fluency in English.
- Eligibility to work in France.

#### **Bonus Points:**

- Direct experience with tensor network methods, such as Matrix Product States (MPS).
- Experience working in High-Performance Computing (HPC) environments.
- Previous experience in a customer-facing scientific or technical role.
- Knowledge of Julia, Rust or C++.
- A working knowledge of French.

# What we offer

- A key role in shaping the future of quantum computing as part of an early-stage deep-tech startup.
- The opportunity to directly influence our core products, MIMIQ and the QLU.



- A vibrant, international research environment with close ties to the European Center for Quantum Sciences (CESQ).
- Competitive salary, comprehensive benefits, and professional growth opportunities including access to training and conferences.
- Flexible work arrangements and the chance to enjoy life in Strasbourg, a highly liveable city in the heart of Europe.

# The recruitment process

- **Initial Screening:** A conversation with our CTO to discuss your research background and the role.
- **Technical Interview:** A meeting with members of the Product and Development teams to discuss your technical skills and problem-solving approach.
- **Final Interview:** A final conversation with the leadership team to ensure a perfect match for both sides.

Don't let a few missing qualifications stop you. If you're a strong candidate for the core of this role, we want to see your application.