



About Seeqc

At Seeqc, we are developing the world's first digital quantum computing platform. Our unique chips-scale quantum architecture delivers unparalleled scope for commercial scalability. We have partnered with world-class quantum algorithm teams, and visionary enterprise clients to build quantum computers that will herald a new era in computational power.

You will join a team of experienced executives and scientists with a varied background in quantum technologies and superconductivity. We have established an international presence with facilities in New York, London, and Naples, creating a truly diverse and unique team atmosphere. You will work with our international teams and partners to build a quantum computing platform designed to provide solutions for the ground-breaking challenges faced by our customers; from new drug modelling and building longer-lasting battery technologies, to advanced machine learning.

We are offering a full-time position with highly competitive salary and company benefits including equity options. Seeqc's international presence means that there will be significant opportunity to travel whilst being based in London.

For more info about Seeqc, head to seeqc.com

About your role

You will play a leading role in our development of firmware tools that solve a variety of challenges encountered by both our hardware development team and our quantum algorithm partners and customers. Working closely with our quantum hardware engineers and software partners in this dynamic environment, you will develop innovative solutions for the novel computational challenges realised in our unique hybrid quantum-classical superconducting quantum processor architecture. You will exploit your problem solving and analytical skills to develop high-performance firmware optimised to take full advantage of Seeqc's unique quantum processor architecture.

Your responsibilities will be

- Design, develop and integrate high-quality firmware for industry specific applications in a novel and rapidly evolving technical field
- Identify, prioritize and execute tasks in the firmware development from inception to end-use
- Build specialised firmware and software that spans from assembly language level through to higher level language integration that allows quantum algorithms to be programmed.
- Write technical specifications and analyse algorithm and end-use case requirements

- Work closely with our internal teams and external partners and customers to create and optimise firmware solutions for controlling quantum computers
- Design and implement low-latency digital signal processing algorithms optimised for a unique superconducting classical computer architecture
- Test, debug and problem solve on lab hardware

The experience you'll need

- 3 years full-time, professional software engineering experience relating to computer science and/or quantum information, or an equivalent PhD
- Experience in the design and verification of quantum software protocols
- Proficient in the use of programming languages including Python, Matlab, Julia
- Familiar with quantum computing programming languages including QISKit, Qsharp, QuTiP
- Experienced in building low-level device drivers or embedded software

Even more desirable experience

- >5 years full-time, professional software engineering experience relating to quantum information or > 1 year equivalent Postdoc
- Proficient in advanced programming including C++, JavaScript, Java
- Experience with cloud computing services (Google Cloud Platform, Storage, Compute Engine, Composer, Apache-Airflow)
- Familiarity with version-controlled repositories, such as Git

Our location

You will join our UK based team, currently operating within the quantum measurement facilities at the National Physical Laboratories in Teddington. We are in the process of establishing a dedicated Seeqc UK facility within the greater London area.