

Quantum Computing Scientist/Engineer – Technical Leader

Qunova Computing, Inc. (www.qunovacomputing.com) is a quantum application startup with a focus in quantum chemistry and quantum algorithm development. Our goal is to accelerate new drug and material discovery by developing quantum computing software solutions that will deliver accurate electronic structures of large molecular and solid state systems.

Qunova is looking for a quantum computing theory scientist or software engineer with experience related to the development of quantum algorithms. He/she will contribute to the development of a quantum computing platform and quantum software for applications in quantum simulation and quantum machine learning. Suitable candidates will plan and manage quantum computing platform projects on fundamental quantum computing theories and NISQ computing based high-quality computational solutions for drug discovery applications.

This position is open at Qunova's research centers in South Korea, either in Daejeon or Seoul. The Technical Leader will work hand-in-hand with Qunova's multinational research team and collaborate with the world-renowned scientists in the Qunova-KAIST team, as well as major quantum cloud providers.

Responsibilities

- Lead a team to develop and apply quantum algorithms on quantum operating systems/platforms.
- Develop quantum error correction/filtering/mitigation techniques, VQA/VQE, QAOA, and quantum machine learning for NISQ computers.
- Collaborate with and support Qunova's quantum biochemistry research team.
- Conduct basic research for highly recognized scientific publications and patent disclosures.
- Supervise team members, including computer scientists and quantum computer scientists for the development of quantum software platforms, quantum simulations, and quantum machine learning.

Qualifications

- Ph.D. with min 5 years of experience in quantum computing or a related discipline; experience related to NISQ computing software will be highly considered.
- Advanced knowledge of quantum computing principles and how to generate new application software is desired.
- Variational quantum eigensolver/algorithm (VQE/VQA) experience will be highly considered.
- Experience in computer scripting and programming and significant experience in using Linux/UNIX.
- Ability to work in a collaborative environment and a strong publication record.
- Demonstrated supervisory skills including managing teams and leading research projects in industry and/or academia.

Related skills

- Expertise in quantum computing theory and algorithms, and skills related to quantum software development.
- In-depth understanding of quantum simulations and quantum machine learning, as well as quantum error management.
- Knowledge of data science and machine learning algorithms and tools.
- Programming skills (e.g. Python and C/C++); familiarity with debugging and profiling tools; experience with using scientific and numeric data analysis.
- Networking for technical exchanges in academia and industry.

Salary and Benefits

- Competitive salary depending on level of experience (median salary: US\$100,000 per annum)
- Company stock options
- Fringe benefits including health insurance and retirement plan contributions
- Annual personal holiday plus national holidays, with flexibility to carry over
- Relocation allowance if applicable

Location: Daejeon or Seoul, South Korea

Contact: recruit@qunovacomputing.com