# R&D System Architect (10+ years' experience)

ID Quantique (IDQ) is the world leader in quantum-safe crypto solutions, designed to protect data for the long-term future. The company provides quantum-safe network encryption solutions and services to the financial industry, enterprises, and government organizations. IDQ also commercializes a quantum random number generator (QRNG), which is the reference in the security, simulation, and gaming industries. Additionally, IDQ is a leading provider of optical instrumentation products, most notably photon counters and related electronics. The company's innovative photonic solutions are used in both commercial and research applications.

## Base Qualifications / Responsibilities

- ✓ Fully dedicated to the development of IDQ's QKD systems with a strong focus on architecting solutions to be deployed in various network types and topologies.
- ✓ Have multiple activities inside and outside of R&D.
- ✓ Understand business/customer requirements and transform them into formal technical user stories
- ✓ Define efficient system architectures that scale in large networks
- ✓ Groom the system backlog, participate to the sizing of the stories, and ensure readiness for implementation
- ✓ Support technical teams in defining acceptance criteria, in understanding system workflows, in testing and troubleshooting functional or integration issues
- ✓ Contribute actively to the technology and product roadmap
- ✓ Contribute to the Intellectual Property activities (patents submissions and committee)
- ✓ Contribute to the definition of worldwide standards for Quantum-based security systems
- ✓ Analyse National certification requirements and deploy in the product in line with various team members
- ✓ Experience/expertise in system design and validation, architecture documentation and communication, QKD protocols, post-processing, security analysis and performance modelling, telecom-wavelength fiber optics and optical components, integrated optics, InGaAs/InP single-photon detectors, physical implementation of QRNGs, and/or product design (defining user stories, environmental requirements, industrialization and quality assurance).

## Preferred Qualifications

- ✓ Strong background in QKD system architecture and system validation.
- ✓ Strong knowledge of telecom-wavelength fiber optics and optical components, integrated optics, and InGaAs/InP single-photon detectors
- ✓ Good experience in security-related products, ideally around secure key distribution and hardware security modules
- ✓ Team player, good communicator and ability to formalize and structure the information
- ✓ Quick learner and can-do attitude in a fast-pace environment
- ✓ Good English communication in written and verbal
- ✓ PhD in Electronics/Electrical Engineering or Physics or equivalent

**The position is open immediately.**

Should you be interested in this opportunity, please send a full application to:

**HRKorea@idquantique.com**

**Reference to be mentioned in the subject of your e-mail: Korea RHE10**

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