Quantum eMotion Partners with The Platform for Digital and Quantum Innovation (PINQ²) for Testing its Security Platform using IBM Quantum Computer Powered Simulated Attacks

written by Raj Shah | March 18, 2024

March 18, 2024 (Source) – Quantum eMotion Corp. (TSXV: QNC) (OTCQB: QNCCF) ("QeM" or the "Company"), is thrilled to announce its strategic partnership with the The Platform for Digital and Quantum Innovation (PINQ²), a non-profit organization (NPO) founded in 2021 by the Ministry of Economy, Innovation and Energy of Quebec (MEIE – Ministère de l'Économie, de l'Innovation et de l'Énergie du Québec) and the Université de Sherbrooke. This collaboration marks a significant milestone in Quantum eMotion's mission to enhance its security platform's resilience against the most advanced security threats, including simulated quantum computer attacks orchestrated using IBM Quantum's Qiskit platform.

IBM and PINQ² announced last year the installation and availability of Canada's first IBM Quantum System One, along a partnership to accelerate quantum computing research application development to tackle complex and pressing global challenges. PINQ² is the exclusive operator of the cutting-edge 127-qubit IBM Quantum System One located at IBM Bromont.

The project's goal is to thoroughly examine and assess a version of the Kyber algorithm and the Quantum Random Number Generator

(QRNG) that Quantum eMotion currently uses. The project aims to evaluate the QeM security system's performance in a simulated adversarial security setting, ensuring its consistency with the company's strategic goals. Specifically, the project will investigate the technical challenges of the Kyber version through advanced testing, analysis, and possible optimization efforts. Furthermore, quantum attacks will be emulated using Qiskit to confirm the algorithm's resilience against emerging threats.

At the core of this project is a comprehensive review of Quantum eMotion's existing quantum-resistant security framework, identifying its strengths, weaknesses, and potential vulnerabilities. The partnership with PINQ² leverages simulation tools like Qiskit to execute quantum attack simulations, rigorously testing the security solution's durability.

Francis Bellido, CEO of QeM, commented: *"We are very excited to collaborate with PINQ² in this unique endeavor, which has never been done before in this field. This is the first step toward building an open-source test bed for post-quantum security solutions. Eventually, we aim to prove that our security platform can make a significant difference in withstanding the threats posed by quantum computing."*

"We are delighted to partner with Quantum eMotion in this groundbreaking project. Our collaboration will enable us to leverage our expertise and resources to rigorously test Quantum eMotion's security platform against the most advanced threats, including simulated quantum computer attacks.", stated Éric Capelle, Executive Director of PINQ². *"This partnership is a testament to our commitment to driving innovation and advancing the field of quantum-resistant security solutions."*

For more information about Quantum eMotion and its innovative

projects, please visit Quantum eMotion website.

About QeM

The Company's mission is to address the growing demand for affordable hardware and software security for connected devices. QeM has become a pioneering force in classical and quantum cybersecurity solutions thanks to its patented Quantum Random Number Generator, a security solution that exploits the built-in unpredictability of quantum mechanics and promises to provide enhanced protection for high-value assets and critical systems.

The Company intends to target highly valued Financial Services, Healthcare, Blockchain Applications, Cloud-Based IT Security Infrastructure, Classified Government Networks and Communication Systems, Secure Device Keying (IOT, Automotive, Consumer Electronics) and Quantum Cryptography.

About PINQ²

The Platform for Digital and Quantum Innovation is a non-profit organization created by the Université de Sherbrooke and the ministère de l'Économie, de l'Innovation et de l'Énergie du Québec (Ministry of Economy, Innovation and Energy of Quebec) in 2021. Its mission is to support organizations in accelerating their digital transformation, to enhance collaboration, and to simplify technology transfers between industries and research, in addition to training the talents of tomorrow.

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