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AI and Quantum Research Center (AIQRC), Asia University, Taiwan

Activity
[1]
Time/Place: Nov. 13-14, 2025, Asia University, Taichung
Title: INTERNATIONAL SYMPOSIUM ON QUANTUM AI & THE FUTURE OF LIFE
Registration is Free. Use this link to register: https://shorturl.at/nv0Cx

## *Recent developments in QML and AI in FinTech*

Quantum Machine Learning (QML) is expected to greatly boost the FinTech industry by allowing for faster, more precise processing of complicated financial data. Leading financial firms, like JPMorgan Chase, are actively experimenting with quantum algorithms to improve portfolio optimization and risk management, enabling more flexible strategies in volatile markets.

In order to detect fraud, Goldman Sachs has used quantum-enhanced models, which analyze big transaction networks more effectively than conventional techniques. Furthermore, businesses like Berkeley Lights and Santander are investigating quantum machine learning for credit risk assessment, allowing for more precise evaluations based on multidimensional data.

In the banking industry, companies such as HSBC are developing quantum-enhanced algorithms to construct highly personalized investment portfolios. QML can improve financial advice and product suggestions by evaluating huge amounts of individual client data, resulting in increased customer satisfaction and retention.

Companies such as QC Ware and D-Wave are working with quantum algorithms to improve blockchain mining and bitcoin transaction routing. These developments have the potential to make Bitcoin networks more efficient, faster, and less energy-intensive, addressing some of the sustainability and scalability issues that blockchain technologies face today. Furthermore, blockchain platforms are actively developing quantum-resistant cryptographic protocols to protect digital assets from possible risks posed by future quantum computers. Implementing quantum-resistant encryption protects the long-term viability and security of crypto assets, as well as the integrity of decentralized financial systems in a future where quantum attacks could undermine standard cryptographic approaches. These advancements are critical for creating a more secure, scalable, and sustainable bitcoin environment.

In conclusion, the incorporation of QML and quantum technology into FinTech is poised to transform the sector by increasing operational efficiency, security, and tailored financial services. Leading organizations are pioneering advances in portfolio management, fraud

detection, credit risk assessment, and blockchain scalability, addressing crucial obstacles and opening new opportunities. The advancement of quantum-resistant cryptography protects the long-term security of digital assets in the future impacted by quantum computing. Collectively, these breakthroughs usher in a new era of safe, scalable, and highly adaptive financial systems that will transform the landscape of digital banking for many years to come.

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