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On the practicality of Quantum Machine Learning in Africa

Quantum machine learning (QML) is an exciting new field of study which in one respect harnesses the laws of quantum mechanics and applies it to classical machine learning models. QML has a wide variety of potential applications spanning many fields which include healthcare and life sciences, climate and sustainability, finance and optimization. Two parallel activities have emerged to pioneer the field of quantum discoveries: one is the technological advancements required (hardware, software and algorithms) and the other is the rapid exploration of domain-specific problems towards identifying quantum advantage over classical methods.

In this talk, we will provide the participants with an introduction to QML from a theoretical perspective, describe pioneering results reported by IBM Quantum and provide insight on the opportunities available for getting started in Qiskit. This talk is aimed at the academic and industry audience alike, as well as those more junior to the field of quantum machine learning, and those more experienced in running experiments using Qiskit.

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None

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