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## Leveraging Artificial Intelligence and Quantum Machine Learning for economic growth in Africa

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Artificial Intelligence (AI) and Quantum Machine Learning (QML) have become the most promising significant tools for addressing the challenges of the Fourth Industrial Revolution (4IR). Besides its use in understanding physical and complex systems, these tools have demonstrated unmatched potential applications in numerous research disciplines and sectors such as banking, finance, social networks, cybersecurity, and health. Most importantly, recently, they play a critical role in addressing challenges related to the Covid-19 pandemic. While these developments are remarkable, Africa has been lagging. Therefore, this paper aims to identify opportunities behind the challenges of implementing AI and ML in addressing this technology gap, especially in the sectors mentioned above, and to participate in the 4IR fully. While the “quantum difference” presents various opportunities, especially for industries and stakeholders, we examine which challenges can be addressed by these intelligent tools. Thus, this will allow the proper application of these techniques to provide solutions to Africa’s long-standing problems.

### Apply to be considered for a student ; award (Yes / No)?

Yes

### Level for award;(Hons, MSc, PhD, N/A)?

MSc

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