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Webscrapping + QCS

1 Webscrapping

1. It is fine to do some parallel webscrapping, but as a mathematician, I expect for you to do something with the data you collect. Therefore, if you are going to choose this as your main project, you have to propose some kind of data analysis that will be performed over the data you retrieve. This should include some maths that must be included in the equations that you will use.
2. It is true that when webpages do not have APIs to automatically handle data, webscrapping can become extremely tedious, as will depend on the architecture of the webpages. Therefore, I suggest you to provide a set of webpages (or even a single webpage) you plan to scrape. You should choose them based on the ease at the time of implementing a webscrapping algorithm.

2 QCS

3. If you are going to choose this project, you should include the maths related to the Quantum Fourier Transform, which is commonly used to retrieve results from qubits.
4. I suggest you to choose either Shor's or Grover's algorithm, not both.
5. I would like to see concepts like amplitude amplification, superposition and quantum interference being mathematically fully explained. Make sure to do so if you choose Grover's algorithm, because at the moment you are just grasping the physics/mathematical theory behind this algorithm.
6. You certainly require to reduce your proposal to a simple working model, because there are plenty of ways in which you can implement a parallel architecture. I want you to focus on a single algorithm, where you can explicitly comment how you will implement parallel computing.