Quantum Computation 2022/23
TPC-2

Renato Neves

nevrenato@di.uminho.pt

The goal of this assignment is to write a short essay (around 2 pages) that lists and discusses applications of Grover's algorithm [NC16] to different domains. Among other things, we will value essays whose claims and ideas are tested and illustrated via implementations in `Qiskit`. For example, a possibility is to illustrate via one such implementation the claim that Grover's algorithm can be applied to a SAT problem with more than one solution.

> What to submit: The report in `PDF`. Please send by email (`nevrenato@di.uminho.pt`) a unique zip file with the name "`qc2122-N.zip`", where "`N`" is your student number. The subject of the email should be "`qc2122 N TPC-2`".

References

[NC16] Michael A. Nielsen and Isaac L. Chuang. *Quantum Computation and Quantum Information (10th Anniversary edition)*. Cambridge University Press, 2016.