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| **Title** | **Description** | **Link** |
| Languages and execution environments |  | <https://quantumcomputingreport.com/resources/tools/> |
| Algorithms |  | <https://arxiv.org/pdf/1804.03719.pdf>  <http://quantumalgorithmzoo.org/> |
| An Introduction to Quantum Computing, Without the Physics |  | <https://arxiv.org/abs/1708.03684> |
| Quantum Computing: From Circuit To Architecture | Course slides from prof Mainardi at Politecnico | <https://drive.google.com/open?id=18YM_nzN23mZ67ra_X7kw1-AwZ3rmNcf_> |
| Quantum Computing for Computer Scientists | A presentation from microsoft about math of QC and some example of logic gates | <https://www.youtube.com/watch?v=F_Riqjdh2oM>  + slides  <https://www.microsoft.com/en-us/research/uploads/prod/2018/05/40655.compressed.pdf> |
| Quantum Casts | Video playlist from TensorFlow channel. 4 videos (to be uploaded) about QC | <https://www.youtube.com/playlist?list=PLQY2H8rRoyvwcpm6Nf-fL4sIYQUXtq3HR> |
| Visual representation of some quantum principles | Some complex quantum principles are explained in a graphical way, to help in better understanding the basic principles of quantum computing technology | <http://toutestquantique.fr/en/> (<http://www.quantummadesimple.com/>)  <https://commons.wikimedia.org/w/index.php?title=File%3AQuantum_superposition_of_states_and_decoherence.ogv> |
| Microsoft Quantum advent calendar | Each day of December they publish an article about quantum computing, Q# or quantum algorithms implementations. | <https://blogs.msdn.microsoft.com/visualstudio/2018/11/15/q-advent-calendar-2018/> |
| A Practical Introduction to Tensor Networks: Matrix Product States and Projected Entangled Pair States | An explanation of how tensor networks do work. It seems well done to me. | <https://arxiv.org/abs/1306.2164> |
| Overview and Comparison of Gate Level Quantum Software Platforms |  | <https://arxiv.org/pdf/1807.02500.pdf> |
| Cirq , the new python library made by google. |  | https://github.com/quantumlib/Cirq |
| QC — Programming with Quantum Gates (Single Qubits) |  | https://medium.com/@jonathan\_hui/qc-programming-with-quantum-gates-8996b667d256 |
| Paper on Quantum Sudoku |  | https://www.researchgate.net/publication/326978036\_Solving\_Sudoku\_Game\_Using\_Quantum\_Computation |