# A PRACTICAL INTRODUCTION TO QUANTUM COMPUTING RECOMMENDED BOOKS AND RESOURCES

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# **General Quantum Computing**

- Quantum Computing for Computer Scientists, Noson S. Yanofsky, Mirco A. Mannucci.
   Cambridge University Press, 2008.
- Lectures Notes on Quantum Computation, John Watrous https://cs.uwaterloo.ca/~watrous/QC-notes/QC-notes.pdf
- Learn Quantum Computation using Qiskit, Abraham Asfaw et al. https://qiskit.org/textbook/preface.html
- Quantum Computation and Quantum Information: 10<sup>th</sup> Anniversary Edition, Michael A. Nielsen, Isaac L. Chuang. Cambridge University Press, 2011.
- A First Introduction to Quantum Computing and Information, Bernard Zygelman. Springer, 2018.
- Quantum Computation and Information, video lectures by Ryan O'Donnell. https://www.youtube.com/playlist?list=PLm3J0oaFux3YL5qLskC6xQ24JpMwOAeJz

### **Quantum Machine Learning**

• **Supervised Learning with Quantum Computers**, Maria Schuld, Francesco Petruccione. Springer, 2018.

# **Quantum Cryptography**

 Quantum Cryptography, online course coordinated by Stephanie Wehner and Thomas Vidick <a href="https://ocw.tudelft.nl/courses/quantum-cryptography/">https://ocw.tudelft.nl/courses/quantum-cryptography/</a>

# **Quantum Computers Technology**

 The Building Blocks of a Quantum Computer, online course coordinated by Stephanie Wehner, Lieven Vandersypen, Menno Veldhorst, K.L.M. Bertels and L. DiCarlo, https://ocw.tudelft.nl/courses/building-blocks-quantum-computer-part-1/