

A PRACTICAL INTRODUCTION TO QUANTUM COMPUTING

RECOMMENDED BOOKS AND RESOURCES

Elías F. Combarro (combarro@gmail.com)

University of Oviedo (Oviedo, Spain)
CERN openlab (Geneva, Switzerland)

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: 10th 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 <https://ocw.tudelft.nl/courses/quantum-cryptography/>