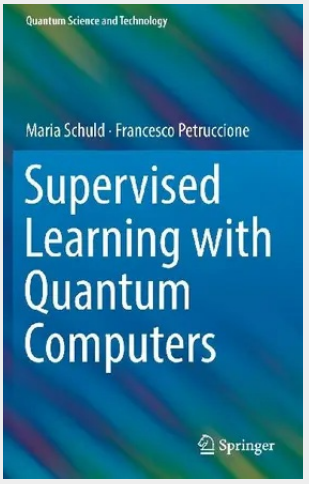
Schuld / Petruccione

Supervised Learning with Quantum Computers

Quantum machine learning investigates how quantum computers can be used for data-driven prediction and decision making. The books summarises and conceptualises ideas of this relatively young discipline for an audience of computer scientists and physicists from a graduate level upwards. It aims at providing a starting point for those new to the field, showcasing a toy example of a quantum machine learning algorithm and providing a detailed introduction of the two parent disciplines. For more advanced readers, the book discusses topics such as data encoding into quantum states, quantum algorithms and routines for inference and optimisation, as well as the construction and analysis of genuine ``quantum learning models''. A special focus lies on supervised learning, and applications for near-term quantum devices.

Quantum machine learning investigates how quantum computers can be used for data-driven prediction and decision making. The books summarises and conceptualises ideas of this relatively young discipline for an audience of computer scientists and physicists from a graduate level upwards. It aims at providing a starting point for those new to the field, showcasing a toy example of a quantum machine learning algorithm and providing a detailed introduction of the two parent disciplines. For more advanced readers, the book discusses topics such as data encoding into quantum states, quantum algorithms and routines for inference and optimisation, as well as the construction and analysis of genuine ``quantum learning models''. A special focus lies on supervised learning, and applications for near-term quantum devices.



192,59 €
179,99 € (zzgl. MwSt.)

Lieferfrist: bis zu 10 Tage

Artikelnummer: 9783319964232
Medium: Buch
ISBN: 978-3-319-96423-2
Verlag: Springer
Erscheinungstermin: 22.09.2018
Sprache(n): Englisch
Auflage: 1. Auflage 2018
Serie: Quantum Science and Technology
Produktform: Gebunden
Gewicht: 623 g
Seiten: 287
Format (B x H): 160 x 241 mm

Kundenservice Verlag Dr. Otto Schmidt KG
Neumannstraße 10, 40235 Düsseldorf | kundenservice@otto-schmidt.de | 0221-93738-997 (Inland)