

Alfio Quarteroni

Algorithms for a New World

When Big Data
and Mathematical Models
Meet



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About the Book

How will the increasingly intrusive presence of artificial intelligence and computers capable of autonomous learning define our near future? Using a non-specialist language, this book will take us on a journey through mathematical models based on the knowledge of physical processes, and more recent models based on artificial neural networks. The purpose is to raise our attention to the challenges, opportunities, and dangers of a world regulated by mathematics and its algorithms and to show us how artificial intelligence and humanism can find a synthesis that benefits not only progress but also our well-being.