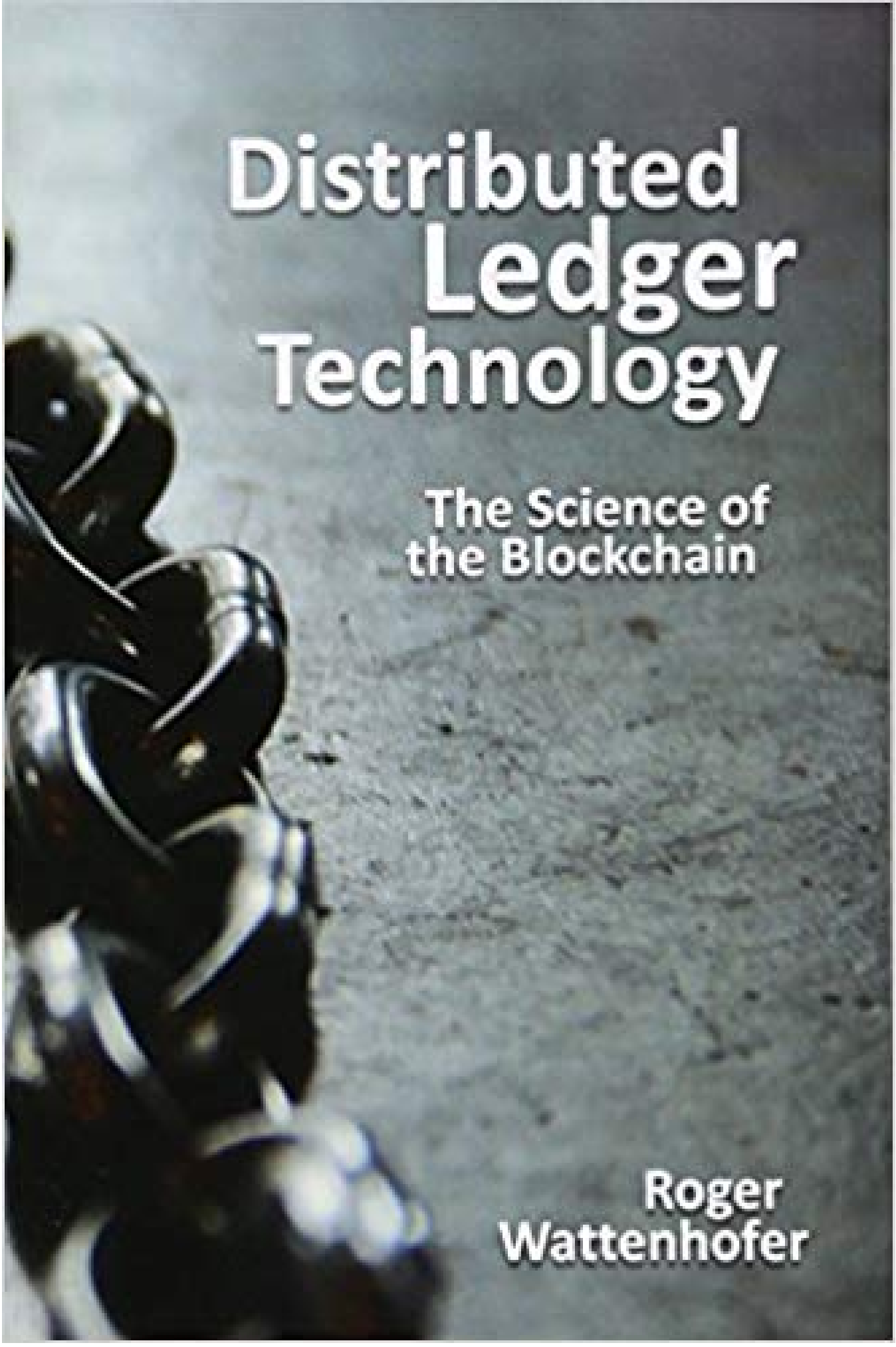
Distributed Ledger Technology
The Science of the Blockchain
Roger Wattenhofer

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Distributed Ledger Technology: The Science of the Blockchain

FinTech programmers and managers recognize that the blockchain gets the potential to disrupt the financial globe. Various ideas and protocols exist, each with its own benefits and drawbacks. In the distributed systems community, agreement methods have been known long before cryptocurrencies such as for example Bitcoin (where the term blockchain is definitely borrowed) emerged. Distributed ledger technology allows the participants of a distributed program to agree on a common view of the machine, to track changes in the system, in a reliable way. We will present different protocols and algorithms that enable fault-tolerant operation, and we'll discuss useful systems that put into action these techniques. This publication introduces the basic methods when building fault-tolerant distributed systems, in a scientific method.

Good scientific introduction and background to the blockchain. This book is the second edition of "The Science of the Blockchain", which contains, along with small fixes, two new chapters: (1) an introduction to cryptography and (2) Bitcoin beyond the blockchain. I will not discuss the additional chapters here, please browse the other evaluations offered on Amazon for the 1st edition. For me, already the 1st edition was a very good book. While only 20 pages long, these are the 20 web pages you should read if you do not have a cryptography history.g., how to make best use of hashing your messages - and how never to do it.(1) The new cryptography chapter provides fundamental knowledge regarding topics such as key exchange, public essential strategies, and message authentication: e. Good review of basic bc tech Easy readIn summary, especially considering the cheap price of the book, I can only recommend it. Intensive chapter notes are provided, citing over 45 other works. A very nice overview.(2) The next brand-new chapter, "Inside Bitcoin", discusses cryptographic tools, message formats, and the ecosystem. Further reading materials for the interested reader is normally linked.