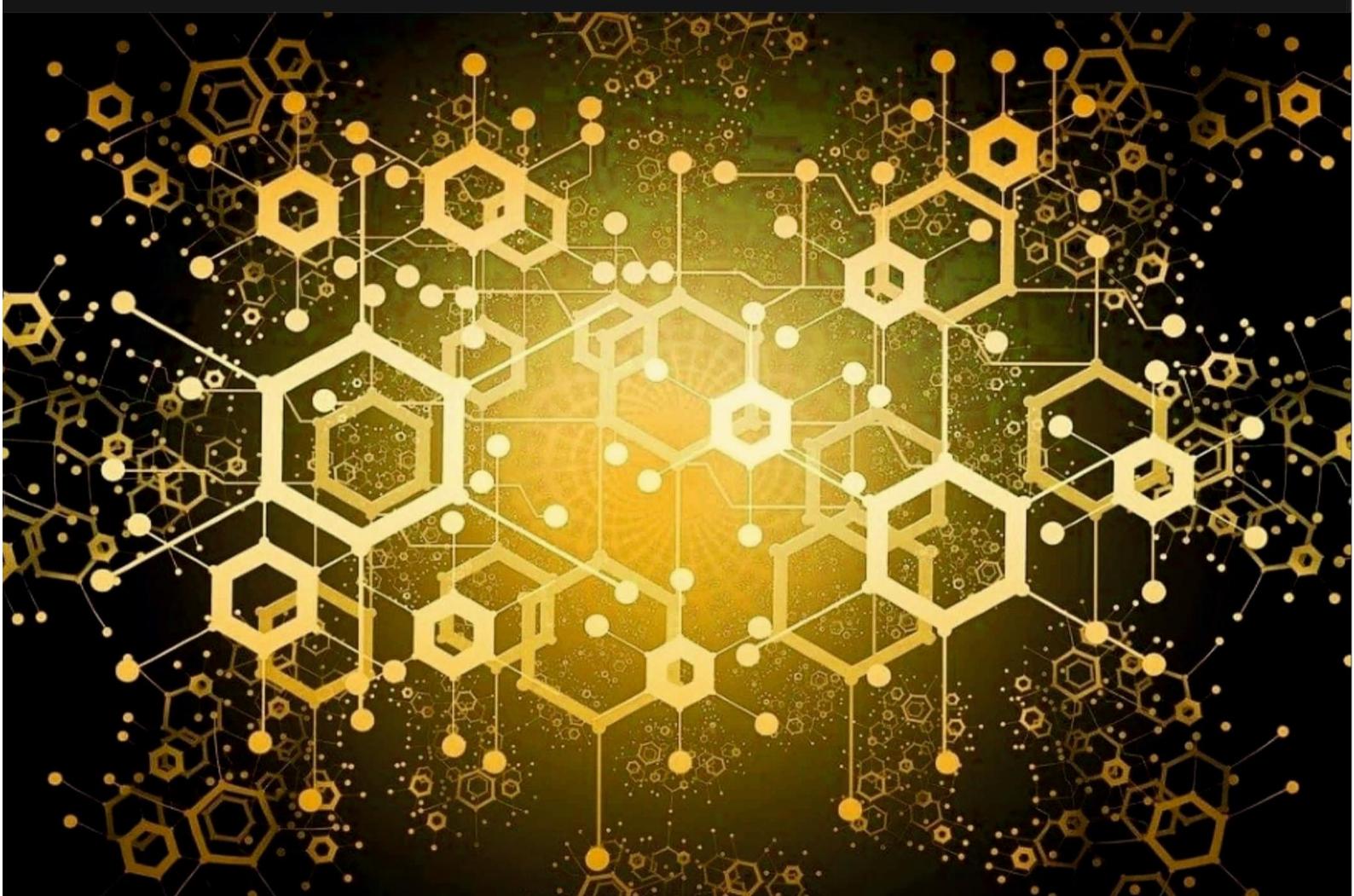


FUNDAMENTALS OF

BLOCKCHAIN TECHNOLOGY



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FUNDAMENTALS OF BLOCKCHAIN TECHNOLOGY

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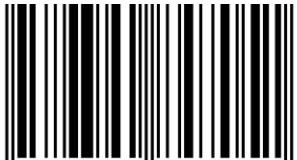
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PREFACE

The purpose of **Fundamentals of Blockchain Technology** book is to teach you about the theoretical aspects of blockchain technology. This book covers all the fundamentals of Blockchain technology that you need to know to become a Blockchain expert. This book is a vision to advance the technology behind this innovation, thus providing a fundamental explanation of this technology. With the help of this book, readers can learn the following topics in-depth in a very simple way: Introduction to Blockchain Cryptographic Primitives Blockchain Types Consensus Algorithms Challenges in Blockchain Technology.

This Book, equips you with an understanding of what blockchain is, how it works, and how it can enhance your business and the industry in which it operates. You learn the fundamentals of blockchain and how this technology will revolutionize transactions and business networks. You also discover the important difference between blockchain and block-chain for business and what makes blockchain an ideal solution for streamlining business networks. You will also discover Hyperledger, a Linux Foundation project, designed to help advance technology and thought leadership of cross-industry blockchain technologies. You learn about Hyperledger Fabric, an open source framework, and the instrumental role it plays in developing a blockchain for business. Finally, you find out everything you need to spin up a blockchain network today.

Abbreviations

Anti-Money Laundering (AML)

Application Binary Interface (ABI)

Bitcoin (BTC)

Bitcoin Cash (BCH)

Block Header (BH)

Byzantine Fault Tolerance (BFT)

Chain Virtual Machine (CVM),

Decentralised Applications (Dapps)

Decentralised Autonomous Organisations (DAOs)

Decentralized Autonomous Organization (DAO)

Denial of Service (DoS)

Digital Applications (DApps)

Directed Acyclic Graphs (DAG)

Distributed Denial of Service (DDoS)

Distributed Ledger Technologies (DLT)

Distributed Ledger Technology (DLT)

Domain Name System (DNS)

Domain Name System (DNS)

Ethereum Virtual computer (EVM)

Ethereum Virtual Machine (EVM)

Initial Coin Offerings (ICOs)

Initial Public Offering (IPO)

Internet of Things (IoT)

Know Your Customer (KYC)

Litecoin (LTC)

Machines as a Service (MaaS)

Man in The Middle (MITM)

Mobility Open Blockchain Initiative (MOBI)

Peer-To-Peer (P2P)

Progressive Web Apps (PWAs)

Proof of Activity (PoA)

Proof of Elapsed Time (PoET)

Proof of Stake (PoS)

Proof of Work (PoW)

Proof-Of-Work (PoW)

Pure Proof-Of-Stake (PPoS)

RACE Integrity Primitives Evaluation Message Digest (RIPEMD)

Responsible Sourcing Blockchain Network (RSBN)

Self-Sovereign Identification (SSI)

Supply Chain Management (SCM)

USD Coin (USDC)

Verifiable Random Functions (VRF)

Virtual Machine (EVM)

Zero-Knowledge Proofs (ZKPs)

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