Call for Book Chapters

Essentials of Blockchain Technology

CRC Press, Taylor & Francis Group, USA

DATES

Proposal Submission
August 10, 2018

Complete Chapter Submission (to editors):
January 10, 2019

Submission of Chapters (to publisher):
January 20, 2019

Publication Time:
Q3/2019 (estimated)

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All types of transactions such as purchase orders, payments, account tracking and delivery tracking may take place every single second. The business goal is to ensure the smooth completion of end-to-end transactions and reduce vulnerabilities. More and more people are looking at a new technology - Blockchain. A blockchain – originally block chain – is a continuously growing list of records, called blocks, which are linked and secured using cryptography. Each block contains typically a hash pointer as a link to a previous block, a timestamp and transaction data. By design, blockchains are inherently resistant to modification of the data. A blockchain is an open, distributed ledger that can record transactions between two parties efficiently and in a verifiable and permanent way. As a promising technique to achieve decentralized consensus, Blockchain helps achieve benefits critical to enterprises and create extraordinary opportunities for businesses to come together in new ways. Particularly in finance, it has been successfully applied to digital cryptocurrencies and Blockchain-based systems have received significant attention in both academia and industry.

Book co-editors intend to invite experts and successful case participating members to contribute discussions on topics related to performance, benchmarking, durability, robustness, as well data gathering and management, algorithms, analytics techniques for transactions processing and implementation of applications.

Topics

Topics include, but are not limited to, the following:

- Theories of blockchain and its evolution- Applications with blockchain technique
- Protocols and algorithms based on blockchain
- Smart contract and distributed ledger
- Blockchain and Bitcoin security
- Distributed consensus and fault tolerance mechanisms
- Blockchain schemes for decentralization
- Security, privacy and trust management, and performance optimization of blockchain and decentralized schemes
- Attacks on blockchain based systems
- Blockchain based lightweight data structures for IoT data- Blockchain based IoT security solutions
- Blockchain in CPS, social networking, crowdsourcing, crowdsensing, 5G, edge and cloud computing
- Lightweight clients and simple payment verification in Bitcoin

Proposal submission

A proposal for book chapter is needed from prospective authors before the proposal *submission due date*, describing the objective, scope and structure of the proposed chapter (no more than 5 pages). With the chapter proposal, please also submit a brief biography of each author. Acceptance of chapter proposals will be communicated to lead chapter authors after a formal double-blind review process, to ensure relevance, quality and originality. The submission of chapter proposals should be sent directly via email to editors.

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