

Title: **Decentralized Collaborative Learning for Data Privacy and Security**

Subtitle: **Advancing Trustworthy AI Through Decentralized Intelligence**

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Estimated publication date: **April 2026**

Scope of work:

Decentralized Collaborative Learning for Data Privacy and Security, explores emerging technologies and frameworks that enable privacy-preserving machine learning across distributed environments. The central focus is on integrating blockchain technology with collaborative learning systems particularly federated learning to ensure trust, transparency, and data sovereignty. The content guides readers through designing and implementing decentralized AI systems where raw data remains local and only encrypted or privacy-protected model updates are shared across peers. The book "Decentralized Collaborative Learning for Data Privacy and Security" is essential because it addresses the growing need for privacy preserving AI in an era of strict data regulations (like GDPR) and rising cyber threats. Traditional centralized Machine Learning systems depend on raw data interchange, creating liabilities to security intrusions and inappropriate management. Organizations can train models while keeping raw data private – a critical advantage for healthcare, finance, and IoT use cases by leveraging decentralized methods like federated learning, blockchain-AI systems, and edge computing.

Tentative table of contents or list of topics:

Chapter 1: Introduction to Decentralized Collaborative Learning	Chapter 2: The Role of AI in Privacy-Aware Data Collaboration
Chapter 3: Understanding Data Privacy in the Age of Distributed AI	Chapter 4: Blockchain Fundamentals for Secure AI Systems
Chapter 5: Federated Learning and its Blockchain Integration	Chapter 6: Smart Contracts for Autonomous Learning Governance
Chapter 7: Consensus Algorithms and Their Impact on Collaborative AI	Chapter 8: Privacy-Preserving AI with Differential Privacy
Chapter 9: Cryptographic Techniques for Secure Learning	Chapter 10: Zero-Knowledge Proofs for Model Integrity and Privacy
Chapter 11: Edge and Fog Computing for Distributed Intelligence	Chapter 12: Incentive Models and Token Economics in Learning Networks
Chapter 13: Healthcare Applications of Blockchain-AI Collaboration	Chapter 14: Financial Sector Use Cases: Privacy-Preserving Fraud Detection
Chapter 15: Smart Cities and IoT with Blockchain-AI Integration	Chapter 16: Legal and Regulatory Challenges in Cross-Border AI Collaboration
Chapter 17: Ethical Implications of Decentralized AI Systems	Chapter 18: Technical Challenges and System Limitations
Chapter 19: Emerging Research and Innovations in Blockchain-AI Fusion	Chapter 20: The Future of Decentralized, Secure, and Intelligent Systems.

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Important Dates:

Abstract Submission (of approx. 500 words): **30-07-2025**

Abstract Acceptance: **15-08-2025**

Full Chapter Submission: **30-09-2025**

Chapter Acceptance: **20-10-2025**

Final chapter Submission (in Word): **20-11-2025**

Submission to Publisher: **30-01-2026**

The book will be published under the Wiley-Scrivener imprint and will be indexed by *Scopus* and offered to *Web of Science*.

How to Submit Your Chapter:

Send your 500-word abstract by the designated deadline to:

<https://bit.ly/DCL-ABSTRACT>

Advise us how many words your chapter is likely to be and the number of figures/tables. Note we are looking for a range of 8,000-12,000 words. Make sure list all co-authors with complete contact information and links to Google Scholar Profile and CVs. The publisher's guidelines can be located at <https://www.scrivenerpublishing.com/guidelines.php>. Note that all chapters will be put through similarity software and publisher's guidelines are an overall similarity index of less than 15% (with maximum 3% from any single source). **Full Chapter submission Link: <https://bit.ly/DCL-Full>**

Reviewing Policy: The editor(s) will engage 2 single blind peer-reviewers to assess originality, clarity, usefulness, and adherence to scope of project.

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