

Advancements in Blockchain Technology for Secure Distributed Systems

Jamie Carter

PhD

University of Toronto

27 King's College Cir, Toronto, ON M5S, Canada

Kai Edwards

PhD

Lviv Polytechnic National University

12 Bandera St, Lviv, Lviv Oblast, Ukraine, 79000

Ashley Hernandez

PhD

University of Sydney

Camperdown NSW 2006, Australia

Abstract. This article discusses the latest advancements in blockchain technology and their implications for enhancing security in distributed systems. Blockchain's decentralized nature offers a robust framework for secure transactions and data storage, minimizing the risks associated with central points of failure. We highlight recent developments that improve scalability, transaction speed, and integration capabilities, positioning blockchain as a critical component in the future of secure computing infrastructures.

Keywords: blockchain, security, distributed, systems, technology

Introduction: The rise of blockchain technology has ushered in a new era of possibilities for creating more secure distributed systems. Its decentralized and transparent structure provides an ideal foundation for developing systems that require high levels of trust and security, free from the vulnerabilities of centralized control. This paper examines recent innovations in blockchain that aim to address scalability and integration challenges, making blockchain technology more viable for widespread use in complex computing environments. By enhancing transaction efficiency and reducing latency, these advancements contribute to the broader adoption of blockchain as a secure and scalable solution.

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References

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