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Sommario/riassunto	The book serves as an essential guide and a deep dive into the intersection of AI and finance, providing readers with a thorough understanding of the current state, challenges, and future possibilities of autonomous financial systems. In the rapidly evolving domain of autonomous finance, the convergence of computational intelligence techniques and financial technologies has paved the way for a new era of financial services. This transformation is driven by the integration of artificial intelligence (AI), machine learning (ML), blockchain, and big data analytics into financial systems, leading to the development of more responsive, efficient, and personalized financial products and services. Computational Intelligence for Autonomous Finance delves into the heart of this technological revolution, offering a comprehensive exploration of the theoretical foundations, practical

applications, and future prospects of computational intelligence in the financial sector. The backbone of autonomous finance is a complex, interconnected ecosystem that leverages computational intelligence to automate decision-making processes, optimize financial operations, and enhance customer experiences. The book introduces the concept of an Intelligent Autonomous Financial Network (IAFN), which integrates various computational intelligence techniques with cutting-edge financial technologies to create a self-organizing, adaptive, and scalable financial system. The IAFN framework facilitates seamless interactions between diverse financial entities, enabling the provision of innovative financial services such as automated trading, real-time risk management, personalized financial planning, and fraud detection. The book meticulously analyzes the key challenges including data security and privacy concerns, algorithmic biases, regulatory compliance, and the need for interoperable standards. It also presents state-of-the-art solutions and best practices for overcoming these challenges, emphasizing the importance of ethical AI, robust data protection mechanisms, transparent algorithms, and collaborative regulatory frameworks. It discusses emerging trends such as quantum computing, edge computing, and decentralized finance (DeFi), highlighting their potential to further transform the financial landscape. The book also addresses the societal implications of autonomous finance, including its impact on employment, wealth distribution, and financial inclusion, advocating for a balanced approach that maximizes benefits while minimizing negative outcomes. Audience This book is aimed at researchers, industry professionals, policymakers, and graduate students in finance, computational intelligence, and related fields.