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Altri autori (Persone)	TakamuraHiroya
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Soggetti	Artificial intelligence Multiagent systems Machine learning Business - Data processing Business information services Natural language processing (Computer science) Artificial Intelligence Multiagent Systems Machine Learning Business Analytics Business Information Systems Natural Language Processing (NLP)
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Sommario/riassunto	This open access book provides an overview of the current state of financial argument mining and financial text generation, and presents the authors' thoughts on the blueprint for NLP in finance in the agent AI era. Financial documents contain numerous causal inferences and subjective opinions. In a previous book, "From Opinion Mining to Financial Argument Mining" (Springer, 2021), the first author discussed

understanding financial documents in a fine-grained manner, particularly those containing opinions. The book highlighted several future directions, such as financial argument mining, multimodal opinion understanding, and analysis generation, and anticipated a lengthy journey for these topics. However, since 2022, ChatGPT and large language models (LLMs) have shown promising advancements, motivating the authors to write this second book on the topic of financial Natural Language Processing (NLP). Agent-based AI systems have been widely discussed since the advent of LLMs. This book aims to equip researchers and practitioners with the latest methodologies, concepts, and frameworks for developing, deploying, and evaluating AI agents with capabilities in multimodal understanding, decision-making, and interaction. It places a special emphasis on human-centered decision-making and multi-agent cooperation in financial applications. The book surveys the current landscape and discuss future research and development directions. Targeting a wide audience, from students to seasoned researchers in AI and finance, this book offers an overview of recent trends in Agent AI for finance. It provides a foundation for students to understand the field and design their research direction, while inviting experienced researchers to engage in discussions on open research questions informed by pilot experimental results. Although this book focuses on financial applications, the discussed concepts and methods can also be applied to other real-world applications by integrating domain-specific characteristics. The authors look forward to seeing new findings and more novel extensions based on the proposed ideas.

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