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   Soggetti   Data mining
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   Lingua di pubblicazione   Inglese

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   Nota di contenuto   1. General Introduction -- 2. Preliminaries -- 3. Taming Variety and
                       Velocity -- 4. Streaming Linked Data Life Cycle -- 5. Web Stream
                       Processing Systems and Benchmarks -- 6. Exercise Book.

   Sommario/riassunto This book provides a comprehensive overview of core concepts and
                       technological foundations for continuous engineering of Web streams.
                       It presents various systems and applications and includes real-world
                       examples. Last not least, it introduces the readers to RSP4J, a novel
                       open-source project that aims to gather community efforts in software
                       engineering and empirical research. The book starts with an
                       introductory chapter that positions the work by explaining what
                       motivates the design of specific techniques for processing data streams
                       using Web technologies. Chapter 2 briefly summarizes the necessary
                       background concepts and models needed to understand the remaining
                       content of the book. Subsequently, chapter 3 focuses on processing
                       RDF streams, taming data velocity in an open environment

characterized by high data variety. It introduces query answering algorithms with RSP-QL and analytics functions over streaming data. Chapter 4 presents the life cycle of streaming linked data, it focuses on publishing streams on the Web as a prerequisite aspect to make data findable and accessible for applications. Chapter 5 touches on the problems of benchmarks and systems that analyze Web streams to foster technological progress. It surveys existing benchmarks and introduces guidelines that may support new practitioners in approaching the issue of continuous analytics. Finally, chapter 6 presents a list of examples and exercises that will help the reader to approach the area, get used to its practices and become confident in its technological possibilities. Overall, this book is mainly written for graduate students and researchers in Web and stream data management. It collects research results and will guide the next generation of researchers and practitioners.