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Descrizione fisica	1 online resource (XIII, 204 p. 71 illus., 40 illus. in color.)
Disciplina	004.5
Soggetti	Computer science Operating systems (Computers) Data structures (Computer science) Memory management (Computer science) Computer network architectures Data Storage Representation Operating Systems Data Structures Memory Structures Data Structures and Information Theory Computer System Implementation
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Nota di contenuto	1. Backgrounds of Searchable Storage -- 2. Hashing Computation for Scalable Metadata -- 3. The Component of Searchable Storage: Semantic-Aware Namespace -- 4. Semantic-AwareMetadata Organization for Exact-matching Queries -- 5. Locality-Sensitive Bloom Filter for Approximate Membership Query -- 6. Near Real-time Searchable Analytics for Images -- 7. Data Similarity-aware Computation Infrastructure for the Cloud -- 8. Semantic-aware Data Cube for Cloud Networks.
Sommario/riassunto	This book presents the state-of-the-art work in terms of searchable storage in cloud computing. It introduces and presents new schemes for exploring and exploiting the searchable storage via cost-efficient semantic hashing computation. Specifically, the contents in this book include basic hashing structures (Bloom filters, locality sensitive

hashing, cuckoo hashing), semantic storage systems, and searchable namespace, which support multiple applications, such as cloud backups, exact and approximate queries and image analytics. Readers would be interested in the searchable techniques due to the ease of use and simplicity. More importantly, all these mentioned structures and techniques have been really implemented to support real-world applications, some of which offer open-source codes for public use. Readers will obtain solid backgrounds, new insights and implementation experiences with basic knowledge in data structure and computer systems.