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Autore	Zhu Tianqing
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Descrizione fisica	1 online resource (XIII, 235 p. 71 illus.)
Collana	Advances in Information Security, , 1568-2633 ; ; 69
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Soggetti	Data mining Computer security Artificial intelligence Data Mining and Knowledge Discovery Systems and Data Security Privacy Artificial Intelligence
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Preliminary of Differential Privacy -- Differentially Private Data Publishing: Settings and Mechanisms -- Differentially Private Data Publishing: Interactive Setting -- Differentially Private Data Publishing: Non-interactive Setting -- Differentially Private Data Analysis -- Differentially Private Deep Learning -- Differentially Private Applications: Where to Start? -- Differentially Private Social Network Data Publishing -- Differentially Private Recommender System -- Privacy Preserving for Tagging Recommender Systems -- Differential Location Privacy -- Differentially Private Spatial Crowdsourcing -- Correlated Differential Privacy for Non-IID Datasets -- Future Directions.
Sommario/riassunto	This book focuses on differential privacy and its application with an emphasis on technical and application aspects. This book also presents the most recent research on differential privacy with a theory perspective. It provides an approachable strategy for researchers and engineers to implement differential privacy in real world applications.

Early chapters are focused on two major directions, differentially private data publishing and differentially private data analysis. Data publishing focuses on how to modify the original dataset or the queries with the guarantee of differential privacy. Privacy data analysis concentrates on how to modify the data analysis algorithm to satisfy differential privacy, while retaining a high mining accuracy. The authors also introduce several applications in real world applications, including recommender systems and location privacy Advanced level students in computer science and engineering, as well as researchers and professionals working in privacy preserving, data mining, machine learning and data analysis will find this book useful as a reference. Engineers in database, network security, social networks and web services will also find this book useful.