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Disciplina	005.8
Soggetti	Data structures (Computer science) Data encryption (Computer science) Database management Mathematical statistics Computers and civilization Computers Law and legislation Data Structures and Information Theory Cryptography Database Management Probability and Statistics in Computer Science Computers and Society Legal Aspects of Computing
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Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Foundations of Tabular Protection -- Survey on Methods for Tabular Data Protection in ARGUS -- Data Swapping: Variations on a Theme by Dalenius and Reiss -- Bounds for Cell Entries in Two-Way Tables Given Conditional Relative Frequencies -- Methods for Tabular Protection -- A New Tool for Applying Controlled Rounding to a Statistical Table in

Microsoft Excel -- Getting the Best Results in Controlled Rounding with the Least Effort -- Computational Experiments with Minimum-Distance Controlled Perturbation Methods -- Balancing Quality and Confidentiality for Multivariate Tabular Data -- Reducing the Set of Tables ? -ARGUS Considers in a Hierarchical Setting -- Approaches to Identify the Amount of Publishable Information in Business Surveys through Waivers -- Maximum Utility-Minimum Information Loss Table Server Design for Statistical Disclosure Control of Tabular Data -- A Fast Network Flows Heuristic for Cell Suppression in Positive Tables -- Masking for Microdata Protection -- On the Security of Noise Addition for Privacy in Statistical Databases -- Microaggregation for Categorical Variables: A Median Based Approach -- Evaluating Fuzzy Clustering Algorithms for Microdata Protection -- To Blank or Not to Blank? A Comparison of the Effects of Disclosure Limitation Methods on Nonlinear Regression Estimates -- Outlier Protection in Continuous Microdata Masking -- Risk in Microdata Protection -- Re-identification Methods for Masked Microdata -- Masking and Re-identification Methods for Public-Use Microdata: Overview and Research Problems -- A Bayesian Hierarchical Model Approach to Risk Estimation in Statistical Disclosure Limitation -- Individual Risk Estimation in ?-Argus: A Review -- Analysis of Re-identification Risk Based on Log-Linear Models -- Synthetic Data -- New Approaches to Confidentiality Protection: Synthetic Data, Remote Access and Research Data Centers -- Multiply-Imputing Confidential Characteristics and File Links in Longitudinal Linked Data -- Fast Generation of Accurate Synthetic Microdata -- Software and Case Studies -- Trade-Off between Disclosure Risk and Information Loss Using Multivariate Microaggregation: A Case Study on Business Data -- The ARGUS Software in the CASC-Project -- Different Grades of Statistical Disclosure Control Correlated with German Statistics Law -- Developing Adoptable Disclosure Protection Techniques: Lessons Learned from a U.S. Experience -- Privacy Preserving and Data Mining in an On-Line Statistical Database of Additive Type.

Sommario/riassunto

Privacy in statistical databases is about finding tradeoffs to the tension between the increasing societal and economical demand for accurate information and the legal and ethical obligation to protect the privacy of individuals and enterprises, which are the source of the statistical data. Statistical agencies cannot expect to collect accurate information from individual or corporate respondents unless these feel the privacy of their responses is guaranteed; also, recent surveys of Web users show that a majority of these are unwilling to provide data to a Web site unless they know that privacy protection measures are in place. "Privacy in Statistical Databases2004" (PSD2004) was the final conference of the CASC project ("Computational Aspects of Statistical Confidentiality", IST-2000-25069). PSD2004 is in the style of the following conferences: "Statistical Data Protection", held in Lisbon in 1998 and with proceedings published by the Office of Official Publications of the EC, and also the AMRADS project SDC Workshop, held in Luxemburg in 2001 and with proceedings published by Springer-Verlag, as LNCS Vol. 2316. The Program Committee accepted 29 papers out of 44 submissions from 15 different countries on four continents. Each submitted paper received at least two reviews. These proceedings contain the revised versions of the accepted papers. These papers cover the foundations and methods of tabular data protection, masking methods for the protection of individual data (microdata), synthetic data generation, disclosure risk analysis, and software/case studies.
