

## I Big Data E II Diritto Antitrust

This book focuses on the analytic principles of business practice and big data. Specifically, it provides an interface between the main disciplines of engineering/technology and the organizational and administrative aspects of management, serving as a complement to books in other disciplines such as economics, finance, marketing and risk analysis. The contributors present their areas of expertise, together with essential case studies that illustrate the successful application of engineering management theories in real-life examples.

This two-volume set, LNCS 11317 and 12318, constitutes the thoroughly refereed proceedings of the 4th International Joint Conference, APWeb-WAIM 2020, held in Tianjin, China, in September 2020. Due to the COVID-19 pandemic the conference was organized as a fully online conference. The 42 full papers presented together with 17 short papers, and 6 demonstration papers were carefully reviewed and selected from 180 submissions. The papers are organized around the following topics: Big Data Analytics; Graph Data and Social Networks; Knowledge Graph; Recommender Systems; Information Extraction and Retrieval; Machine Learning; Blockchain; Data Mining; Text Analysis and Mining; Spatial, Temporal and Multimedia Databases; Database Systems; and Demo.

Big Data has been much in the news in recent years, and the advantages conferred by the collection and analysis of large datasets in fields such as marketing, medicine and finance have led to claims that almost any real world problem could be solved if sufficient data were available. This is of course a very simplistic view, and the usefulness of collecting, processing and storing large datasets must always be seen in terms of the communication, processing and storage capabilities of the computing platforms available. This book presents papers from the International Research Workshop, Advanced High Performance Computing Systems, held in Cetraro, Italy, in July 2014. The papers selected for publication here discuss fundamental aspects of the definition of Big Data, as well as considerations from practice where complex datasets are collected, processed and stored. The concepts, problems, methodologies and solutions presented are of much more general applicability than may be suggested by the particular application areas considered. As a result the book will be of interest to all those whose work involves the processing of very large data sets, exascale computing and the emerging fields of data science

The volume LNCS 12393 constitutes the papers of the 22nd International Conference Big Data Analytics and Knowledge Discovery which will be held online in September 2020. The 15 full papers presented together with 14 short papers plus 1 position paper in this volume were carefully reviewed and selected from a total of 77 submissions. This volume offers a wide range to following subjects on theoretical and practical aspects of big data analytics and knowledge discovery as a

new generation of big data repository, data pre-processing, data mining, text mining, sequences, graph mining, and parallel processing.

This book constitutes the refereed proceedings of the Second International Conference on Data Mining and Big Data, DMBD 2017, held in Fukuoka, Japan, in July/August 2017. The 53 papers presented in this volume were carefully reviewed and selected from 96 submissions. They were organized in topical sections named: association analysis; clustering; prediction; classification; schedule and sequence analysis; big data; data analysis; data mining; text mining; deep learning; high performance computing; knowledge base and its framework; and fuzzy control.

This book constitutes the refereed proceedings of the 18th International Conference on Data Warehousing and Knowledge Discovery, DaWaK 2016, held in Porto, Portugal, September 2016. The 25 revised full papers presented were carefully reviewed and selected from 73 submissions. The papers are organized in topical sections on Mining Big Data, Applications of Big Data Mining, Big Data Indexing and Searching, Big Data Learning and Security, Graph Databases and Data Warehousing, Data Intelligence and Technology.

Il Convegno nasce come espressione della volontà della Soprintendenza Speciale Archeologica Beni Artistici e del Paesaggio di Roma, condivisa con questa Azienda, di ampliare le conoscenze sugli ipogei, che insistono al di sotto dei nostri Presidi Ospedalieri, in relazione e in analogia a quanto già condotto in precedenza, presso l'area di insediamento della Basilica Costantiniana, intitolata al Santissimo Salvatore, e le aree adiacenti, sulle quali vennero edificate tutte le altre strutture a compimento del Patriarchio, sin dal IV sec. d.C. La sopra citata volontà si è concretizzata con una apposita Convenzione, sottoscritta nel febbraio del 2018, che ha ritenuto di coinvolgere studiosi, appartenenti a prestigiose Università Italiane ed Internazionali, i cui attori principali erano quelli che fino ad allora avevano già dato il loro massimo contributo di alto valore scientifico, sia sull' Area Lateranense sia nell'area di competenza dell'Antico Ospedale. The Conference came about as the expression of the desire of the Soprintendenza Speciale Archeologica Beni Artistici e del Paesaggio for Rome, a desire which our Administration also shared, to expand knowledge of the underground remains that stand below our hospital buildings, in relation to, and in analogy with, the work already done in the past, near the area where the Constantinian Basilica stood, which was dedicated to the Most Holy Saviour, and the adjacent areas, on which were built all the other structures to complete the Patriarchio, ever since the 4th century AD. This aforementioned desire took concrete shape with a special Agreement, signed up to in February 2018, which set out to involve academics from prestigious Universities, in Italy and abroad. The main players in this Agreement were the same ones who, up until that time, had already made their biggest contribution, of high scientific value, both in the Lateran Area and in the area pertaining to the Ancient Hospital itself.

This open access book describes the technologies needed to construct a secure big data infrastructure that connects data owners, analytical institutions, and user institutions in a circle of trust. It begins by discussing the most relevant technical issues involved in creating safe and privacy-preserving big data distribution platforms, and especially focuses on cryptographic primitives and privacy-preserving techniques, which are essential prerequisites. The book also covers elliptic curve cryptosystems, which offer compact public key cryptosystems; and LWE-based cryptosystems, which are a type of post-quantum cryptosystem. Since big data distribution platforms require appropriate data handling, the book also describes a privacy-preserving data integration protocol and privacy-preserving classification protocol for secure computation. Furthermore, it introduces an anonymization technique and privacy risk evaluation technique. This book also describes the latest related findings in both the living safety and medical fields. In the living safety field, to prevent injuries occurring in everyday life, it is necessary to analyze injury data, find problems, and implement suitable measures. But most cases don't include enough information for injury prevention because the necessary data is spread across multiple organizations, and data integration is difficult from a security standpoint. This book introduces a system for solving this problem by applying a method for integrating distributed data securely and introduces applications concerning childhood injury at home and school injury. In the medical field, privacy protection and patient consent management are crucial for all research. The book describes a medical test bed for the secure collection and analysis of electronic medical records distributed among various medical institutions. The system promotes big-data analysis of medical data with a cloud infrastructure and includes various security measures developed in our project to avoid privacy violations.

This volume contains the proceedings of the International Workshop on Perspectives on High-dimensional Data Analysis II, held May 30-June 1, 2012, at the Centre de Recherches Mathématiques, Université de Montréal, Montréal, Quebec, Canada. This book collates applications and methodological developments in high-dimensional statistics dealing with interesting and challenging problems concerning the analysis of complex, high-dimensional data with a focus on model selection and data reduction. The chapters contained in this book deal with submodel selection and parameter estimation for an array of interesting models. The book also presents some surprising results on high-dimensional data analysis, especially when signals cannot be effectively separated from the noise, it provides a critical assessment of penalty estimation when the model may not be sparse, and it suggests alternative estimation strategies. Readers can apply the suggested methodologies to a host of applications and also can extend these methodologies in a variety of directions. This volume conveys some of the surprises, puzzles and success stories in big data analysis and related fields. This book is co-published with the Centre de Recherches Mathématiques.

This state-of-the-art Research Handbook provides an overview of research into, and the scope of current thinking in, the field of big data analytics and the law. It contains a wealth of information to survey the issues surrounding big data analytics in legal

settings, as well as legal issues concerning the application of big data techniques in different domains.

With the onset of massive cosmological data collection through media such as the Sloan Digital Sky Survey (SDSS), galaxy classification has been accomplished for the most part with the help of citizen science communities like Galaxy Zoo. Seeking the wisdom of the crowd for such Big Data processing has proved extremely beneficial. However, an analysis of one of the Galaxy Zoo morphological classification data sets has shown that a significant majority of all classified galaxies are labelled as “Uncertain”. This book reports on how to use data mining, more specifically clustering, to identify galaxies that the public has shown some degree of uncertainty for as to whether they belong to one morphology type or another. The book shows the importance of transitions between different data mining techniques in an insightful workflow. It demonstrates that Clustering enables to identify discriminating features in the analysed data sets, adopting a novel feature selection algorithms called Incremental Feature Selection (IFS). The book shows the use of state-of-the-art classification techniques, Random Forests and Support Vector Machines to validate the acquired results. It is concluded that a vast majority of these galaxies are, in fact, of spiral morphology with a small subset potentially consisting of stars, elliptical galaxies or galaxies of other morphological variants. This book constitutes the refereed proceedings of the 4th Annual International Symposium on Information Management and Big Data, SIMBig 2017, held in Lima, Peru, in September 2017. The 10 revised full papers presented were carefully reviewed and selected from 71 submissions. The papers address issues such as Data Science, Big Data, Data Mining, Natural Language Processing, Text Mining, Information Retrieval, Machine Learning, Semantic Web, Ontologies, Web Mining, Knowledge Representation and Linked Open Data, Social Web and Web Science, Information Visualization.

This book constitutes the thoroughly refereed proceedings of the 16th Italian Research Conference on Digital Libraries, IRCDL 2020, held in Bari, Italy, in January 2020. The 12 full papers and 6 short papers presented were carefully selected from 26 submissions. The papers are organized in topical sections on information retrieval, big data and data science in DL; cultural heritage; open science.

Ogni giorno nel mondo vengono creati miliardi di dati digitali. Questa mole di informazione proviene dal notevole incremento di dispositivi che automatizzano numerose operazioni – record delle transazioni di acquisto e segnali GPS dei cellulari, per esempio – e dal Web: foto, video, post, articoli e contenuti digitali generati e diffusi dagli utenti tramite i social media. L’elaborazione di questi “big data” richiede elevate capacità di calcolo, tecnologie e risorse che vanno ben al di là dei sistemi convenzionali di gestione e immagazzinamento dei dati. Il testo esplora il mondo dei “grandi dati” e ne offre una descrizione e classificazione, presentando le opportunità che possono derivare dal loro utilizzo. Descrive le soluzioni software e hardware dedicate, riservando ampio spazio alle implementazioni Open Source e alle principali offerte cloud. Si propone dunque come una guida approfondita agli strumenti e alle tecnologie che permettono l’analisi e la gestione di grandi quantità di dati. Il volume è dedicato a chi, in università e in azienda (database administrator, IT manager, professionisti di Business Intelligence) intende approfondire le tematiche relative ai big data. È, inoltre, un valido supporto per il management aziendale per comprendere come ottenere

informazioni utilizzabili nei processi decisionali. Alessandro Rezzani insegna presso l'Università Bocconi di Milano. È esperto di progettazione e implementazione di Data Warehouse, di processi ETL, database multidimensionali e soluzioni di reporting. Attualmente si occupa di disegno e implementazione di soluzioni di Business Intelligence presso Factory Software. Con Apogeo Education ha pubblicato "Business Intelligence. Processi, metodi, utilizzo in azienda", 2012.

Il big data marketing non è solo l'applicazione al marketing tradizionale di strumenti di analisi innovativi, bensì un modo nuovo e diverso di fare marketing e business. Oggi è fondamentale spostare l'attenzione su come i big data stanno trasformando i processi di marketing e su come la conoscenza di questi cambiamenti può aiutare a migliorare le attività di marketing e di business più in generale. Questo volume è un'introduzione critica alle pratiche di big data marketing, anche nella vasta area delle big data analytics. La descrizione delle nuove tecnologie e dei nuovi approcci (dall'Internet of Things all'intelligenza artificiale, dal data mining al machine learning) è sviluppata sia su un piano teorico sia sulla base di specifici casi aziendali, ed è posta costantemente in relazione con i cambiamenti strategici in atto, nell'intento di supportare i manager nel decision making quotidiano in azienda. L'obiettivo è non solo offrire un quadro di ciò che è possibile fare con i big data ma, soprattutto, spingere il lettore a riflettere sul tema, e quindi ad affrontare anche il dark side della società e dell'economia dei big data. Un contributo che aiuta a capire come sta cambiando l'idea stessa di marketing ancora oggi applicata e a definire framework e principi di decisione manageriale utili per chi voglia esplorare le trasformazioni in atto e far leva sulle nuove opportunità.

The changes brought about by digital technology and the consequent explosion of information known as Big Data have brought opportunities and challenges in all areas of society, and the law is no exception. This book, Knowledge of the Law in the Big Data Age contains a selection of the papers presented at the conference 'Law via the Internet 2018', held in Florence, Italy, on 11-12 October 2018. This annual conference of the 'Free Access to Law Movement' (<http://www.fatlm.org>) hosted more than 60 international speakers from universities, government and research bodies as well as EU institutions. Topics covered range from free access to law and Big Data and data analytics in the legal domain, to policy issues concerning access, publishing and the dissemination of legal information, tools to support democratic participation and opportunities for digital democracy. The book is divided into 3 sections: Part I provides an introductory background, covering aspects such as the evolution of legal science and models for representing the law; Part II addresses the present and future of access to law and to various legal information sources; and Part III covers updates in projects, initiatives, and concrete achievements in the field. The book provides an overview of the practical implementation of legal information systems and the tools to manage this special kind of information, as well as some of the critical issues which must be faced, and will be of interest to all those working at the intersection of law and technology.

ArcheoLogica Data wants to reach an Italian and international audience of scholars, professionals, students, and, more generally, early-career archaeologists, and it accepts contributions written both in Italian and English. ArcheoLogica Data proposes to indissolubly associate data and interpretation. It embraces that global idea of ??archaeological data that integrates all the discipline declinations without any thematic or chronological constraints. Data is at the centre, and

around lies everything that can stem from it: interpretations, hypotheses, reconstructions, applications, theoretical and methodological reflections, critical ideas, constructive discussions.

This book presents the current trends, technologies, and challenges in Big Data in the diversified field of engineering and sciences. It covers the applications of Big Data ranging from conventional fields of mechanical engineering, civil engineering to electronics, electrical, and computer science to areas in pharmaceutical and biological sciences. This book consists of contributions from various authors from all sectors of academia and industries, demonstrating the imperative application of Big Data for the decision-making process in sectors where the volume, variety, and velocity of information keep increasing. The book is a useful reference for graduate students, researchers and scientists interested in exploring the potential of Big Data in the application of engineering areas.

This book constitutes the refereed proceedings of the 21st International Conference on Big Data Analytics and Knowledge Discovery, DaWaK 2019, held in Linz, Austria, in September 2019. The 12 full papers and 10 short papers presented were carefully reviewed and selected from 61 submissions. The papers are organized in the following topical sections: Applications; patterns; RDF and streams; big data systems; graphs and machine learning; databases.

This book constitutes the refereed conference proceedings of the 15th International Conference on Rough Sets, Fuzzy Sets, Data Mining and Granular Computing, RSFDGrC 2015, held in Tianjin, China in November 2015 as one of the co-located conference of the 2015 Joint Rough Set Symposium, JRS 2015. The 44 papers were carefully reviewed and selected from 97 submissions. The papers in this volume cover topics such as rough sets: the experts speak; generalized rough sets; rough sets and graphs; rough and fuzzy hybridization; granular computing; data mining and machine learning; three-way decisions; IJCRS 2015 data challenge.

Big Data Architettura, tecnologie e metodi per l'utilizzo di grandi basi di dati Maggioli Editore

I Big Data sono una realtà e la professionalità del data scientist è tanto ambita quanto rara sul mercato del lavoro. All'interno delle aziende, infatti, gli investimenti si concentrano sempre più sull'analisi dei dati, con lo scopo di prendere decisioni efficaci e migliorare prodotti, servizi e vendite. Questo manuale presenta in modo semplice e concreto i Big Data a chi non ha particolare esperienza ma vuole passare velocemente dalla teoria alla pratica. Per questo viene introdotto KNIME, uno strumento open source e gratuito dotato di un'interfaccia grafica che ne semplifica l'utilizzo e permette anche a chi non scrive codice di sfruttare i principali algoritmi di machine learning. Dopo aver definito cosa sono - e non sono - i Big Data, attraverso esempi pratici e tutorial viene spiegato come costruire cluster per organizzare dati e come creare modelli di predizione. Infine vengono introdotti argomenti più avanzati come il riconoscimento e l'analisi del linguaggio umano, e l'estensione delle funzionalità di KNIME con R e Python. Una guida per manager, professionisti e

studenti, ma più in generale per chiunque voglia iniziare a lavorare con i Big Data apprezzandone le opportunità e comprendendone le criticità.

The amount of data shared and stored on the web and other document repositories is steadily on the rise. Unfortunately, this growth increases inefficiencies and difficulties when trying to find the most relevant and up-to-date information due to unstructured data. *Advanced Metaheuristic Methods in Big Data Retrieval and Analytics* examines metaheuristic techniques as an important alternative model for solving complex problems that are not treatable by deterministic methods. Recent studies suggest that IR and biomimicry can be used together for several application problems in big data and internet of things, especially when conventional methods would be too expensive or difficult to implement. Featuring coverage on a broad range of topics such as ontology, plagiarism detection, and machine learning, this book is ideally designed for engineers, graduate students, IT professionals, and academicians seeking an overview of new trends in information retrieval in big data.

This book presents a novel approach to database concepts, describing a categorical logic for database schema mapping based on views, within a framework for database integration/exchange and peer-to-peer. Database mappings, database programming languages, and denotational and operational semantics are discussed in depth. An analysis method is also developed that combines techniques from second order logic, data modeling, co-algebras and functorial categorical semantics. Features: provides an introduction to logics, co-algebras, databases, schema mappings and category theory; describes the core concepts of big data integration theory, with examples; examines the properties of the DB category; defines the categorial RDB machine; presents full operational semantics for database mappings; discusses matching and merging operators for databases, universal algebra considerations and algebraic lattices of the databases; explores the relationship of the database weak monoidal topos w.r.t. intuitionistic logic.

This two-volume set, LNCS 11641 and 11642, constitutes the thoroughly refereed proceedings of the Third International Joint Conference, APWeb-WAIM 2019, held in Chengdu, China, in August 2019. The 42 full papers presented together with 17 short papers, and 6 demonstration papers were carefully reviewed and selected from 180 submissions. The papers are organized around the following topics: Big Data Analytics; Data and Information Quality; Data Mining and Application; Graph Data and Social Networks; Information Extraction and Retrieval; Knowledge Graph; Machine Learning; Recommender Systems; Storage, Indexing and Physical Database Design; Spatial, Temporal and Multimedia Databases; Text Analysis and Mining; and Demo.

Promise, Application and Pitfalls

This book is aimed at students in communications and signal processing who want to extend their skills in the energy area. It describes power systems and why these backgrounds are so useful to smart grid, wireless communications being very different to traditional wireline communications.

As organizations continue to develop, there is an increasing need for technological methods that can keep up with the rising amount of data and information that is being generated. Machine learning is a tool that has become powerful due to its ability to analyze large amounts of data quickly. Machine learning is one of many technological advancements that is being implemented into a multitude of specialized fields. An extensive study on the execution of these advancements within professional industries is necessary. The Handbook of Research on Big Data Clustering and Machine Learning is an essential reference source that synthesizes the analytic principles of clustering and machine learning to big data and provides an interface between the main disciplines of engineering/technology and the organizational, administrative, and planning abilities of management. Featuring research on topics such as project management, contextual data modeling, and business information systems, this book is ideally designed for engineers, economists, finance officers, marketers, decision makers, business professionals, industry practitioners, academicians, students, and researchers seeking coverage on the implementation of big data and machine learning within specific professional fields.

This book constitutes revised and selected papers from the 5th International Symposium on Security and Privacy in Social Networks and Big Data, SocialSec 2019, held in Copenhagen, Denmark, in July 2019. The 18 full papers and 3 short papers presented in this volume were carefully reviewed and selected from a total of 76 submissions. The papers in the volume cover a broad range of topics on security in Internet-of-things, Social Networks, User Authentication, Algorithm design, Artificial Intelligence, and Big Data.

This book covers a range of topics including selective technologies and algorithms that can potentially contribute to developing an intelligent environment and smarter cities. While the connectivity and efficiency of smart cities is important, the analysis of the impact of construction development and large projects in the city is crucial to decision and policy makers, before the project is approved. This book also presents an agenda for future investigations to address the need for advanced tools such as mobile scanners, Geospatial Artificial Intelligence, Unmanned Aerial Vehicles, Geospatial Augmented Reality apps, Light Detection, and Ranging in smart cities. Some of selected specific tools presented in this book are as a simulator for improving the smart parking practices by modelling drivers with activity plans, a bike optimization algorithm to increase the efficiency of bike stations, an agent-based model simulation of human mobility with the use of mobile phone datasets. In addition, this book describes the use of numerical methods to match the network demand and supply of bicycles, investigate the distribution of railways using different indicators, presents a novel algorithm of direction-aware continuous moving K-nearest neighbor queries in road networks, and presents an efficient staged evacuation planning algorithm for multi-exit buildings.

Publisher's note: This is a 2nd edition due to an article retraction

This book reveals the myriad aspects of Big Data collection and analysis, by defining and clarifying the meaning of Big Data and its unique characteristics in a non-technical and easy-to-follow way. Moreover, it discusses critical issues and problems related to the Big Data revolution and their implications for both Statistics as a discipline and for our everyday lives. The author identifies various problems and limitations in the quantitative analysis of Big Data, with regard to e.g. its volume, velocity and variety, as well as its reliability and veridicity. Dedicated chapters focus on the epistemological aspects of data-based knowledge and ethical aspects of the use of Big Data, while also addressing paradigmatic cases such as Cambridge Analytica and the use of data from social networks to influence election outcomes.

Viviamo nell'epoca dell'abbondanza dei dati, da cui tutti traiamo un beneficio in termini di maggiori opportunità di conoscenza del mondo. Questa disponibilità di informazioni, però, non può essere senza limiti, poiché altrimenti ci renderebbe sovraesposti oltre ogni nostro desiderio, muterebbe radicalmente le nostre relazioni sociali e si risolverebbe, in definitiva, nella messa in circolo di una enorme quantità di

dati di bassa qualità e scarsa utilità. Il Regolamento Europeo in materia di protezione dei dati personali coglie perfettamente questi rischi nell'introdurre il principio di privacy by design, che si pone l'obiettivo di individuare nuove forme di tutela per le persone basate sulla leva tecnologica, in aggiunta a quelle che tradizionalmente si sono realizzate intervenendo sulla leva giuridica. Se diritto e tecnologia saranno ben armonizzati, la maggiore disponibilità di dati potrà realmente determinare un cambiamento di tipo cognitivo, permettendoci la scoperta di nuove relazioni tra dati (i Big Data), le persone e gli oggetti (l'internet delle cose). Perché da questa scoperta non nascano rischi per le persone (di sicurezza, ma anche di sottili o gravi discriminazioni) è più che mai necessario rafforzarne la tutela "sin dall'inizio", ossia intervenendo sui trattamenti dal primo momento in cui un servizio o una nuova applicazione sono pensati e progettati. Il libro si pone l'obiettivo di illustrare le principali modalità disponibili per offrire alle persone nuove tutele "per via tecnologica", mediante l'adozione di processi di anonimizzazione e pseudonimizzazione dei dati. Esso si rivolge a chi si occupa di tecnologie, se pure a diversi livelli e con diversa formazione: a chi le progetta, a chi le impiega per realizzare servizi, a chi ne disciplina l'uso all'interno delle aziende o in ambito pubblico, a chi prende decisioni strategiche su investimenti e piani di sviluppo. Ciò al fine di portare a più stretto contatto le diverse anime giuridica, tecnologica e oggi anche economica della protezione dei dati personali. Giuseppe D'Acquisto, ingegnere, funzionario direttivo del Garante per la protezione di dati personali, rappresenta l'Autorità nei tavoli di lavoro internazionali che affrontano temi legati all'uso delle tecnologie. È autore di libri e pubblicazioni scientifiche su temi tecnico-regolamentari quali network e search neutrality, data breach, diritto all'oblio. Maurizio Naldi, docente universitario, è titolare dei corsi di "Sicurezza informatica e Internet" e "Analisi tecnico-economica dei progetti ICT" presso l'Università di Roma Tor Vergata. La sua attività di ricerca riguarda principalmente gli aspetti economici dei servizi e delle tecnologie di rete. È autore di oltre 150 lavori su riviste e conferenze internazionali e Senior Editor della rivista "Electronic Commerce Research and Applications".

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Addressing a broad range of big data analytics in cross-disciplinary applications, this essential handbook focuses on the statistical prospects offered by recent developments in this field. To do so, it covers statistical methods for high-dimensional problems, algorithmic designs, computation tools, analysis flows and the software-hardware co-designs that are needed to support insightful discoveries from big data. The book is primarily intended for statisticians, computer experts, engineers and application developers interested in using big data analytics with statistics. Readers should have a solid background in statistics and computer science.

This book presents cutting edge research on the new ethical challenges posed by biomedical Big Data technologies and practices. 'Biomedical Big Data' refers to the analysis of aggregated, very large datasets to improve medical knowledge and clinical care. The book describes the ethical problems posed by aggregation of biomedical datasets and re-use/re-purposing of data, in areas such as privacy, consent, professionalism, power relationships, and ethical governance of Big Data platforms. Approaches and methods are discussed that can be used to address these problems to achieve the appropriate balance between the social goods of biomedical Big Data research and the safety and privacy of individuals. Seventeen original contributions analyse the ethical, social and related policy implications of the analysis and curation of biomedical Big Data, written by leading experts in the areas of biomedical research, medical and technology ethics, privacy, governance and data protection. The book advances our understanding of the ethical conundrums posed by biomedical Big Data, and shows how practitioners and policy-makers can address these issues going forward.

The recent pursuits emerging in the realm of big data processing, interpretation, collection and organization have emerged in numerous

