Emerging Pervasive Information And Communication Technologies Pict Ethical Challenges Opportunities And Safeguards Law Governance And Technology Series

This volume, the result of an ongoing bridge building effort among engineers and humanists, addresses a variety of philosophical, ethical, and policy issues emanating from engineering and technology. Interwoven through its chapters are two themes, often held in tension with one another: "Exploring Boundaries" and "Expanding Connections." "Expanding Connections" highlights contributions that look to philosophy for insight into some of the challenges engineers face in working with policy makers, lay designers, and other members of the public. It also speaks to reflections included in this volume on the connections between fact and value, reason and emotion, engineering practice and the social good, and, of course, between engineering and philosophy. "Exploring Boundaries" highlights contributions that focus on some type of demarcation. Public policy sets a boundary between what is regulated from what is not, academic disciplines delimit themselves by their subjects and methods of inquiry, and professions approach problems with unique goals and by using concepts and language in particular ways that create potential obstacles to collaboration with other fields. These and other forms of boundary setting are also addressed in this volume. Contributors explore these two themes in a variety of specific contexts, including engineering epistemology, engineers' social responsibilities, engineering and public policy-making, engineering innovation, and the affective dimensions of engineering work. The book also includes analyses of social and ethical issues with emerging technologies such as 3-D printing and its use in medical applications, as well as social robots. Initial versions of the invited papers included in this book were first presented at the 2014 meeting of the Forum on Philosophy, Engineering, and Technology (fPET), held at Virginia Tech in Blacksburg, Virginia, USA. The volume furthers fPET's intent of extending and developing the philosophy of engineering as an academic field, and encouraging conversation, promoting a sense of shared enterprise, and building community among philosophers and engineers across a diversity of cultural backgrounds and approaches to inquiry.

Artificial Intelligence to Solve Pervasive Internet of Things Issues discusses standards and technologies and wide-ranging technology areas and their applications and challenges, including discussions on architectures, frameworks, applications, best practices, methods and techniques required for integrating AI to resolve IoT issues. Chapters also provide step-by-step measures, practices and solutions to tackle vital decision-making and practical issues affecting IoT technology, including autonomous devices and computerized systems. Such issues range from adopting, mitigating, maintaining, modernizing and protecting AI and IoT infrastructure components such as scalability, sustainability, latency, system decentralization and maintainability. The book enables readers to explore, discover and implement new solutions for integrating AI to solve IoT issues. Resolving these issues will help readers address many real-world applications in areas such as scientific research, healthcare, defense, aeronautics, engineering, social media, and many others. Discusses intelligent techniques for the implementation of Artificial Intelligence in Internet of Things Prepared for researchers and specialists who are interested in the use and integration of IoT and Artificial Intelligence technologies

International statistical comparisons of nations have become commonplace in the contemporary landscape of education policy and social science. This book discusses the emergence of these international comparisons as a particular style of reasoning about education, society and science. By examining how international educational assessments have come to dominate much of contemporary policymaking concerning school system performance, the authors provide concrete case studies highlighting the preeminent role of numbers in furthering neoliberal education reform. Demonstrating how numbers serve as 'rationales' to shape and fashion social issues, this text opens new avenues for thinking about institutional and epistemological factors that produce and shape educational policy, research and schooling in transnational contexts.

Information technology is transforming the practices of medicine, nursing, and biomedical research. Computers can now render diagnoses and prognoses more accurately than humans. The concepts of privacy and confidentiality are evolving as data moves from paper to silicon to clouds. Big data promises financial wealth, as well as riches of information and benefits to science and public health. Online access and mobile apps provide patients with an unprecedented connection to their health and health records. This transformation is as unsettling as it is exhilarating. This unique new book is essential for anyone who uses computers in health care, biomedical research or public health, and cares about the ethical issues that arise in their work. With chapters spanning issues from professionalism and quality to mobile health and bioinformatics, it establishes what will become the 'core curriculum' in ethics and health informatics, a growing field which encourages truly inter- and multidisciplinary inquiry.

Reporting the findings of COST 2100, a major European intergovernmental project, this volume offers system designers a good source of guidelines based on channel characterization and measurement-based modeling, as well as worthwhile ideas for future research.

Across the world, most people are well aware of ordinary criminal harms to person and property. Often committed by the powerless and poor, these individualized crimes are catalogued in the statistics collected annually by the FBI and by similar agencies in other developed nations. In contrast, the more harmful and systemic forms of injury to person and property committed by powerful and wealthy individuals, groups, and national states are neither calculated by governmental agencies nor annually reported by the mass media. As a result, most citizens of the world are unaware of the routinized "crimes of the powerful", even though they are more likely to experience harms and injuries from these types of organized offenses than they are from the atomized offenses of the powerless. Research on the crimes of the powerful brings together several areas of criminological

focus, involving organizational and institutional networks of powerful people that commit crimes against workers, marketplaces, taxpayers and political systems, as well as acts of torture, terrorism, and genocide. This international handbook offers a comprehensive, authoritative and structural synthesis of these interrelated topics of criminological concern. It also explains why the crimes of the powerful are so difficult to control. Edited by internationally acclaimed criminologist Gregg Barak, this book reflects the state of the art of scholarly research, covering all the key areas including corporate, global, environmental, and state crimes. The handbook is a perfect resource for students and researchers engaged with explaining and controlling the crimes of the powerful, domestically and internationally.

The Occupy movement and the Arab Spring have brought global attention to the potential of social media for empowering otherwise marginalized groups. This book addresses questions like what happens after the moment of protest and global visibility and whether social media can also help sustain civic engagement beyond protest.

Provides extensive information about pervasive computing and its implications from various perspectives so that current and future pervasive service providers can make responsible decisions about where, when and how to use this technology.

Intelligent Data Sensing and Processing for Health and Well-being Applications uniquely combines full exploration of the latest technologies for sensor-collected intelligence with detailed coverage of real-case applications for healthcare and well-being at home and in the workplace. Forward-thinking in its approach, the book presents concepts and technologies needed for the implementation of today's mobile, pervasive and ubiquitous systems, and for tomorrow's IoT and cyber-physical systems. Users will find a detailed overview of the fundamental concepts of gathering, processing and analyzing data from devices disseminated in the environment, as well as the latest proposals for collecting, processing and abstraction of data-sets. In addition, the book addresses algorithms, methods and technologies for diagnosis and informed decision-making for healthcare and well-being. Topics include emotional interface with ambient intelligence and emerging applications in detection and diagnosis of neurological diseases. Finally, the book explores the trends and challenges in an array of areas, such as applications for intelligent monitoring in the workplace for well-being, acquiring data traffic in cities to improve the assistance of first aiders, and applications for supporting the elderly at home. Examines the latest applications and future directions for mobile data sensing in an array of health and well-being scenarios Combines leading computing paradigms and technologies, development applications, empirical studies, and future trends in the multidisciplinary field of smart sensors, smart sensor networks, data analysis and machine intelligence methods Features an analysis of security, privacy and ethical issues in smart sensor health and well-being applications Equips readers interested in interdisciplinary projects in ubiquitous computing or pervasive computing and ambient intelligence with the latest trends and developments

We tell stories about who we are. Through telling these stories, we connect with others and affirm our own sense of self. Spaces, be they online or offline; private or public; physical, augmented or virtual; or of a hybrid nature, present the performative realms upon which our stories unfold. This volume focuses on how digital platforms support, enhance, or confine the networked self. Contributors examine a range of issues relating to storytelling, platforms, and the self, including the live-reporting of events, the curation of information, emerging modalities of journalism, collaboratively formed memories, and the instant historification of the present.

At the core of this book is the interplay between technological and business innovation and social practice. Although the bene?ts of 50 years of rapid advances in digital telecommunications and computing technology have not bene?ted everyone equally, they have nevertheless transformed almost every aspectofthewaywelive.Oneareawheretechnologyhashada clearimpactis in the way we conduct business. The rate of change that brings about mod- nity has been considerably strengthened by technological advances applied to product manufacturing, distribution, ?nancing, and management, which arguably form the substrate for globalization and consumerism. It is thus no surprise that businesses closely monitor advances in techn- ogy and invest considerable resources in exploring possible new applications and market opportunities. Yet, consumers' acceptance of new ways of buying and selling depends as much on business and technology as on our society's culture and the culture of the material environment that de?nes our values, sensibilities, and thus our commitments. Moreover, the rate of technological innovation is such that to the c- sumer, technology implementation is fully opaque.Nonetheless, opportunities to carry out commerce in novel ways also introduce risk to established - cial structures, conventions, and institutions. In modernity, risk management is one of the core functions of society and to be successful in this, societies depend on their trust of experts. Experts take risks on behalf of society and are responsible for evaluating the full extent of a particular set of hazards including those associated with a particular technology.

This book studies how technological solutions can be used to alleviate the current state of legal systems, with their clogged up courtrooms and inefficient conflict resolution methods. It reviews the shortcomings and disadvantages of traditional and alternative conflict resolution methods and turns to Artificial Intelligence for problem-solving techniques and solutions. The book is divided into four parts. The first part presents a general and systematic analysis of the current state of the legal systems, identifying the main problems and their causes. It then moves on to present UM Court: a framework for testing and prototyping conflict resolution services. This framework was developed with the objective of using Artificial Intelligence techniques to build a service environment for conflict resolution. The third part of the book takes a step into the future by analyzing the use of Intelligent Environments in the support of conflict management and resolution. It describes the approach taken and the experiments performed in the Intelligent Systems Lab of the University of Minho. The final part of the book contains the conclusions and shows the potential advantages of the use of Intelligent Environments as a way to implement better conflict resolution procedures (virtual or real), in which all the participants have access to more and better information and are able to take better informed decisions.

This engaging and timely book provides an in-depth analysis of work and labour relations within global platform capitalism with a specific focus on digital platforms that organise labour processes, known as labour platforms. Well-respected contributors thoroughly examine both online and offline platforms, their distinct differences and the important roles they play for both large transnational companies and those with a smaller global reach.

This book sets out a vision ofpervasive IT through intelligent spaces and describes some ofthe progress that has been made towards its realisation. The context for intelligent spaces (or iSpaces) is the world where information and communication technology (ICT) disappears as it becomes embedded into physical objects and the spaces in which we live and work. The ultimate vision is that this embedded technology provides us with intelligent and contextually relevant support, augmenting our lives and our experience of the physical world in a benign and non intrusive manner. The enormous advances in hardware, system design, and software that are being achieved enable. this vision. In particular, the performance advances and cost reductions in hardware components - processors, memory, storage, and communications - are making it possible to embed intelligence and communications ability into lower cost objects. The Internet is a living experiment in building complex, distributed systems on a global scale. In software, there have been solid advances in creating systems that can deal with complexities on the scale required to interact with human activity, in limited domains at least. The ultimate vision is

challenging, and there are many obstacles to its realisation.

Information and communication technologies can provide new paradigms in healthcare provision. In particular, new Pervasive Healthcare technologies can revolutionise the dynamics of healthcare, enabling people to remain at home for longer, at lower costs to health and welfare organisations. This book reveals how pervasive healthcare technologies can be designed in conjunction with users and carers, as well as exploring the application of novel methods and technologies.

This book accounts for the transformation of organizations in a post-bureaucratic era by bringing a communicational lens to the ontological discussion on organization/disorganization, offering a conceptual and methodological toolbox for studying dis/organization as communication. Increasingly, scholars acknowledge that communication is constitutive of organization; because meaning is always indeterminate, communication also (and simultaneously) generates disorganization. The book synthesizes the major theoretical trends and empirical studies in communication that engage with dis/organization. Drawing on dialectics, relational ontologies, critical theory, systems theory, and affect thinking, the first part of the book offers communicational explanations of how dis/organization unfolds. The second part of the book grounds this theoretical reflection, providing empirical studies that mobilize diverse methodological and analytical frameworks (e.g., ethnography, situational, interactional and genre analysis) for studying the practices of dis/organization. Overall, the book exposes organizations (and organizing processes) as significantly messier, irrational (or a-rational), and paradoxical than scholars of organization typically think. It also offers readers the conceptual and methodological tools to understand these complex processes as communication. This book will be essential reading for scholars in organizational communication or management and organization studies, together with senior undergraduate and graduate students studying organizational communication, organizational discourse, discourse analysis (including rhetoric, semiotics, pragmatism, narratology) and courses in management studies. It will also be richly rewarding for organizational consultants, managers and executives.

The rapid development of information communication technologies (ICTs) is having a profound impact across numerous aspects of social, economic, and cultural activity worldwide, and keeping pace with the associated effects, implications, opportunities, and pitfalls has been challenging to researchers in diverse realms ranging from education to competitive intelligence.

Natural disasters and cholera outbreaks. Ebola, SARS, and concerns over pandemic flu. HIV and AIDS. E. coli outbreaks from contaminated produce and fast foods. Threats of bioterrorism. Contamination of compounded drugs. Vaccination refusals and outbreaks of preventable diseases. These are just some of the headlines from the last 30-plus years highlighting the essential roles and responsibilities of public health, all of which come with ethical issues and the responsibilities they create. Public health has achieved extraordinary successes. And yet these successes also bring with them ethical tension. Not all public health successes are equally distributed in the population; extraordinary health disparities between rich and poor still exist. The most successful public health programs sometimes rely on policies that, while improving public health conditions, also limit individual rights. Public health practitioners and policymakers face these and other questions of ethics routinely in their work, and they must navigate their sometimes competing responsibilities to the health of the public with other important societal values such as privacy, autonomy, and prevailing cultural norms. This Oxford Handbook provides a sweeping and comprehensive review of the current state of public health ethics, addressing these and numerous other questions. Taking account of the wide range of topics under the umbrella of public health and the ethical issues raised by them, this volume is organized into fifteen sections. It begins with two sections that discuss the conceptual foundations, ethical tensions, and ethical frameworks of and for public health and how public health does its work. The thirteen sections that follow examine the application of public health ethics considerations and approaches across a broad range of public health topics. While chapters are organized into topical sections, each chapter is designed to serve as a standalone contribution. The book includes 73 chapters covering many topics from varying perspectives, a recognition of the diversity of the issues that define public health ethics in the U.S. and globally. This Handbook is an authoritative and indispensable guide to the state of public health ethics today.

This book contributes to illustrating the methodological and technological issues of data management in Pervasive Systems by using the DataBenc project as the running case study for a variety of research contributions: sensor data management, user-originated data operation and reasoning, multimedia data management, data analytics and reasoning for event detection and decision making, context modelling and control, automatic data and service tailoring for personalization and recommendation. The book is organized into the following main parts: i) multimedia information management; ii) sensor data streams and storage; iii) social networks as information sources; iv) context awareness and personalization. The case study is used throughout the book as a reference example.

NetLibrary named the Encyclopedia of Information Communication Technology as their September 2008 e-book of the month! CLICK HERE to view the announcement. The Encyclopedia of Information Communication Technology (ICT) is a comprehensive resource describing the influence of information communication technology in scientific knowledge construction, with emphasis on the roles of product technologies, process technologies, and context technologies. Through 111 authoritative contributions by 93 of the world's leading experts this reference covers the materials and instruments of information technology: from ICT in education to software engineering; the influence of ICT on different environments, including e-commerce, decision support systems, knowledge management, and more; and the most pervasive presence of information technology, including studies and research on knowledge management, the human side of ICT, ICT in healthcare, and virtual organizations, among many others. Addressing many of the fundamental issues of information communication technology, the Encyclopedia of Information Communication Technology will be a top-shelf resource for any reference library.

Pervasive Information Architecture explains the 'why' and 'how' of pervasive information architecture (IA) through detailed examples and real-world stories. It offers insights about trade-offs that can be made and techniques for even the most unique design challenges. The book will help readers master agile information structures while meeting their unique needs on such devices as smart phones, GPS systems, and tablets. The book provides examples showing how to: model and shape information to adapt itself to users' needs, goals, and seeking strategies; reduce disorientation and increase legibility and way-finding in digital and physical spaces; and alleviate the frustration associated with

choosing from an ever-growing set of information, services, and goods. It also describes relevant connections between pieces of information, services and goods to help users achieve their goals. This book will be of value to practitioners, researchers, academics, andstudents in user experience design, usability, information architecture, interaction design, HCI, web interaction/interface designer, mobile application design/development, and information design. Architects and industrial designers moving into the digital realm will also find this book helpful. Master agile information structures while meeting the unique user needs on such devices as smart phones, GPS systems, and tablets Find out the 'why' and 'how' of pervasive information architecture (IA) through detailed examples and real-world stories Learn about trade-offs that can be made and techniques for even the most unique design challenges

The physicist Neils Bohr allegedly wrote that "Prediction is very difficult, especially about the future". Many academics believe that serious scholars should never attempt to write about the future, but some awareness of the ways in which the future of e-government may evolve is needed if well-grounded long-term decisions about issues such as infrastructures, institutions and educational programs are to be made. In addition, future-oriented research is of the utmost importance for informed public debate about technological developments with far reaching societal implications. This book marks the 25th anniversary of the permanent study group on e-government of the European Group for Public Administration, and the papers here were first presented at their 2012 meeting in Bucharest, Romania. The invited authors were not asked for rigorous analyses based on systematic empirical research or deeply rooted in a theoretical framework; instead they were challenged to write thoughtful and measured, but provocative, essays about ICT and public administration in the coming decade. Their contributions are reflections on the nature of new and emerging technologies in the public sector and their impact on government and on democracy itself. The book is divided into three sections: the past and present as starting point for thinking about the future of e-government, imagining the future of government, and implications for research and practice. The many questions raised by developments in ICT for future public administration are presented in a clear and thought-provoking manner, and merit more debate. This volume represents a departure from the normal run of academic publications. It is intended both to provoke academics and administrators to think about questions which will affect all of our futures and to offer a range of creative ideas about how the opportunities presented by technology can be exploited to provide better government and governance.

This book analyses current ethical issues in public health research.

An innovative investigation of the inner workings of Spotify that traces the transformation of audio files into streamed experience. Spotify provides a streaming service that has been welcomed as disrupting the world of music. Yet such disruption always comes at a price. Spotify Teardown contests the tired claim that digital culture thrives on disruption. Borrowing the notion of "teardown" from reverse-engineering processes, in this book a team of five researchers have playfully disassembled Spotify's product and the way it is commonly understood. Spotify has been hailed as the solution to illicit downloading, but it began as a partly illicit enterprise that grew out of the Swedish file-sharing community. Spotify was originally praised as an innovative digital platform but increasingly resembles a media company in need of regulation, raising questions about the ways in which such cultural content as songs, books, and films are now typically made available online. Spotify Teardown combines interviews, participant observations, and other analyses of Spotify's "front end" with experimental, covert investigations of its "back end." The authors engaged in a series of interventions, which include establishing a record label for research purposes, intercepting network traffic with packet sniffers, and web-scraping corporate materials. The authors' innovative digital methods earned them a stern letter from Spotify accusing them of violating its terms of use; the company later threatened their research funding. Thus, the book itself became an intervention into the ethics and legal frameworks of corporate behavior.

Today's ubiquitous computing technology is imbedded in everyday objects from cars to clothes to shipping containers, whose location, context, and state can be monitored, instantly processed, and acted upon. This new volume in the "Advances in Management Information Systems" series provides an in-depth review of the state-of-the-art practices and research opportunities in a new era where information technology resides in physical space. Written for both scholars and practitioners, "Pervasive Information Systems" is organized into three sections, each investigating a distinct part of the subject. Part I focuses on the design challenges of Pervasive Information Systems (PS), and discusses issues relating to the coordination of PS through middleware structures as well as issues related to the efficient deployment of PS. Part II discusses the challenges and limitations of deploying pervasive technologies to support domestic, corporate, and public systems. Part III presents two emerging research fields of PS - design for aesthetics and PS evaluation.

This book provides a wide and deep perspective on the ethical issues raised by pervasive information and communication technology (PICT) – small, powerful, and often inexpensive Internet-connected computing devices and systems. It describes complex and unfamiliar technologies and their implications, including the transformative potential of augmented reality, the power of location-linked information, and the uses of "big data," and explains potential threats, including privacy invaded, security violated, and independence compromised, often through widespread and lucrative manipulation. PICT is changing how we live, providing entertainment, useful tools, and life-saving systems. But the very smartphones that connect us to each other and to unlimited knowledge also provide a stream of data to systems that can be used for targeted advertising or police surveillance. Paradoxically, PICT expands our personal horizons while weaving a web that may ensnare whole communities. Chapters describe particular cases of PICT gone wrong, but also highlight its general utility. Every chapter includes ethical analysis and guidance, both specific and general. Topics are as focused as the Stuxnet worm and as broad as the innumerable ways new technologies are transforming medical care. Written for a broad audience and suitable for classes in emerging technologies, the book is an example of anticipatory ethics – "ethical analysis aimed at influencing the development of new technologies" (Deborah Johnson 2010). The growth of PICT is outpacing the development of regulations and laws to protect individuals, organizations, and nations from unintended harm and malicious

havoc. This book alerts users to some of the hazards of PICT; encourages designers, developers, and merchants of PICT to take seriously their ethical responsibilities – if only to "do no harm" – before their products go public; and introduces citizens and policy makers to challenges and opportunities that must not be ignored.

"This book reports accounting and other information about business processes to assess performance. It discusses the impact of the IT revolution on the accounting function, and indicates the process of IT investment, its advantages and limitations. It is a revolutionary explanation of the purpose of IT investment and its role in organizations"--Provided by publisher.

Emerging Pervasive Information and Communication Technologies (PICT)Ethical Challenges, Opportunities and SafeguardsSpringer Science & Business Media

"The co-author of Moral Machines explores accountability challenges related to a world shaped by such technological innovations as combat drones, 3-D printers and synthetic organisms to consider how people of the near future can be protected, "--Novelist.

Learn all about the major trends and future advancements in ICT! ICT Futures provides an insightful introduction to the major technology trends in Information and Communication Technologies (ICT), and to the economic, commercial and societal environment which is shaping them. The experienced author-team, consisting of experts from both industry and academia, addresses: The interaction between people and technology - how ICT affects every day social practices; the rise of social computing; how the way we interact with information and The devices we use are changing; and how trust can be assured over the Internet. The underlying ICT infrastructure - the semantic web and the semantic intranet; the real-time service-oriented infrastructure; the future optical network; self-managing networks and agents; P2P technologies; pervasiveness; mobility and wireless technology; and how all this infrastructure can be made secure. ICT technology and how it is affecting industries as diverse as health, finance, retail and law. The book covers a vast wealth of material, with a strong focus upon the impending changes to the way ICT operates.This reference is a valuable tool for people in managerial roles, CIOs, CTOs, business and technology strategists, and students undertaking technology MBAs, or technology modules in general MBAs. Professionals working in ICT will also find this book valuable.

"This publication covers the latest innovative research findings involved with the incorporation of technologies into everyday aspects of life"--Provided by publisher.

This book focuses on recent topics related to the convergence of information and communication technologies (ICT) and computing with smart devices. Domain areas of application include social, industrial, business development, and day to day life aspects. This book presents chapters related to the aforementioned topics including case studies showcasing future technological trends and challenges. Topics social inclusion solutions and social changes; smart devices and applications for day to day life; smart IoT and applications; and smart cities solutions. The book is applicable to researchers, students, professionals, and professors in a wide range of fields. Focuses on recent developments in ICT and smart devices that pose a clear benefit for users; Presents applications of ICT in education, health, electronics, communication, networking, computing, tourism, transportation; Appeals to researchers, academics, and professionals in a cross section of disciplines.

"The focus of this book is on the ever increasing capacity of Pervasive context-aware applications that are aiming to develop into context-responsive applications in different application areas"--Provided by publisher.

The classical concept of organizations as solitary 'walled-in' actors with clear operational boundaries is increasingly being challenged. This volume examines why, examines the impact of these changes on organizations and offers conceptual and empirical insights.

This Handbook aims to heighten our awareness of the unique and delicate interplay between 'Culture' and 'Society' in the age of globalization. With particular emphasis on the role of culture in the field of "non-traditional" security, and seeking to define what 'being secure' means in different contexts, this Handbook explores the emerging concept of cultural security, providing a platform for future debates in both academic and policy fields.

This book presents state-of-the-art research on architectures, algorithms, protocols and applications in pervasive computing and networks With the widespread availability of wireless and mobile networking technologies and the expected convergence of ubiquitous computing with these emerging technologies in the near future, pervasive computing and networking research and applications are among the hot topics on the agenda of researchers working on the next generation of mobile communications and networks. This book provides a comprehensive guide to selected topics, both ongoing and emerging, in pervasive computing and networking. It contains contributions from high profile researchers and is edited by leading experts in this field. The main topics covered in the book include pervasive computing and systems, pervasive networking security, and pervasive networking and communication. Key Features: Discusses existing and emerging communications and computing models, design architectures, mobile and pervasive wireless applications, technology and research challenges in pervasive computing systems, networking and communications Provides detailed discussions of key research challenges and open research issues in the field of autonomic computing and networking Offers information on existing experimental studies including case studies, implementation test-beds in industry and academia Includes a set of PowerPoint slides for each chapter for instructors adopting it as a textbook Pervasive Computing and Networking will be an ideal reference for practitioners and researchers working in the areas of communication networking and pervasive computing and networking. It also serves as an excellent textbook for graduate and senior undergraduate courses in computer science, computer engineering, electrical engineering, software engineering, and information engineering and science.

Big data, surveillance, crisis management. Three largely different and richly researched fields, however, the interplay amongst these three domains is rarely addressed. In this enlightening title, the link between these three fields is explored in a consequential order through a variety of contributions and series of unique and international case studies. Indeed, whilst considering crisis management as an "umbrella term" that covers a number of crises and ways of managing them, the reader will also explore the collection of "big data" by governmental crisis organisations. However, this volume also addresses the unintended consequences of using such data. In particular, through the lens of surveillance, one will also investigate how the use and abuse of big data can easily lead to monitoring and controlling the behaviour of people affected by crises. Thus, the reader will ultimately join the authors in their debate of how big data in crisis management needs to be examined as a political process involving questions of power and transparency. An enlightening and highly topical volume, Big Data, Surveillance and Crisis Management will appeal to postgraduate students and postdoctoral researchers interested in fields including Sociology and Surveillance Studies, Disaster and Crisis Management, Media Studies, Governmentality, Organisation Theory and Information Society Studies.

Mobil Computing: Implementing Pervasive Information and Communication Technologies is designed to address some of the business and technical challenges of pervasive computing that encompass current and emerging technology standards, infrastructures and architectures, and innovative and high impact applications of mobile technologies in virtual enterprises. The various articles examine a host of

issues including: the challenges and current solutions in mobile connectivity and coordination; management infrastructures; innovative architectures for fourth generation wireless and Ad-hoc networks; error-free frequency assignments for wireless communication; cost-effective wavelength assignments in optical communication networks; data and transaction modeling in a mobile environment, and bandwidth issues and data routing in mobile Ad-hoc networks.