Information Systems
Web and Pervasive Computing

April 2015 updated catalog
forthcoming, new and backlist book titles

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Jean-Charles Pomerol
Université Pierre et Marie Curie, INSIS/CNRS, Paris
jean-charles.pomerol@upmc.fr

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Topics covered

Big Data
Knowledge Communities
Decision Support Systems
Design of Information Systems
ERP
Implementation of Information Systems
Internet of Things
Management of Information Systems
MOOC
Pervasive Computing
Semantic Web
Social Networks on the Web
Virtual Reality
Web Science

Forthcoming Titles

Agent-Based Spatial Simulation with NetLogo by Banos Arnaud, Lang Christophe, Marilleau Nicolas
Cybercriminality by Freyssinet Eric
Digital Communications in 2 volumes by Le Ruyet Didier, Pischella Mylène
Digital Data Access by Chamoux Jean-Paul
Digital Dynamic Plan by Balantzian Gérard
E-mail and Behavioral Changes by Lagrana Fernando
Hypertext in the Digital Age by Angé Caroline
Information Systems Management by Alban Daniel, Eynaud Philippe, Malaurant Julien
Information Warfare – 2nd edition by Ventre Daniel
Medical Information Systems Ethics by Béranger Jérôme
Models within Geomatics Applications by Libourel Thérèse
Smart City by Ricci Piergiorgio
Supply Chain Management and its Applications in Computer Science by Krichen Saoussen, Ben Jouida Sihem
The Mobility in the Era of SmartCities by Ponti Claudia
Forthcoming Sets

Advances in Information Systems coordinated by Camille Rosenthal-Sabroux
Architecture and Computer Science coordinated by Thierry Ciblac
Data Science coordinated by Florence d’Alché-Buc
Digital Libraries and Collections coordinated by Fabrice Papy
Human-Machine Interaction coordinated by Jérôme Dinet
Information and Communication Utopias coordinated by Vincent Liquète
Intellecual Technologies coordinated by Jean-Max Noyer, Maryse Carmes
Modeling and Management of Contexts coordinated by Patrick Brézillon

Advances in Information Systems
Coordinated by Camille Rosenthal-Sabroux, Université Paris-Dauphine, Paris

From Big Data to Smart Data by lafrate Fernando
Information Systems and Decision by Salles Maryse
Information and Knowledge System by Arduin Pierre-Emmanuel, Grundstein Michel et Rosenthal-Sabroux Camille
Information Systems and Recommendation Systems by Nègre Elsa
Information Systems and Security by Arduin Pierre-Emmanuel, Campo-Paysaa Cédric

Digital Libraries and Collections
Coordinated by Fabrice Papy, Université de Lorraine, Nancy

Digital Libraries by Papy Fabrice, Dinet Jérôme
Document Management at the Heart of Business Processes by Ott Florence, Dessolin-Baumann Sylvie
Intercultural Digital Communication by Favier Laurence, Widad Mustafa El Hadi
This book embodies a pragmatic approach to the topic of Big Data (what it is) and Smart Data (what it for). The author explores the relationship between the two concepts by comparing and contrasting them in the context of a connected world where information technologies are perpetually evolving.

By defining Big Data and Smart Data through the use of concrete examples, the author demystifies these concepts and establishes them as real and current topics in the field of Business Intelligence, as well as within the computer industry.

Using a didactic and progressive approach, whilst avoiding technical language where possible, this book aims to spark the interest of both general and more specialist readers by discussing Big Data and Smart Data as processes involving great creativity, in terms of both the architecture supporting the system and its implementation within business processes.

**From Big Data to Smart Data**
Advances in Information Systems Set – Volume 1
Fernando Iafrate, Disneyland Paris, France

Set coordinated by Camille Rosenthal-Sabroux

ISBN: 9781848217553 • 2015 • 88 pages • USD 55.00 • ISTE-WILEY

**Contents**

1. What is Big Data?
2. What is Smart Data?
4. Summary by Example.

**Du Big Data au Smart Data** – ISBN: 9781784050689

The above title is published in French by ISTE Editions (www.iste-editions.fr)
Digital Identity Management
Edited by Maryline Laurent, Telecom SudParis and Samia Bouzefrane, CNAM, Paris, France

Coordinated by Jean-Charles Pomerol

ISBN: 9781785480041 • 2015 • 266 pages • USD 155.00 • ISTE-ELSEVIER

This book addresses our current progress and viewpoints on digital identity management in different fields (social networks, cloud computing, Internet of Things (IoT)), with input from experts in computer science, law, economics and sociology. Within this multidisciplinary and scientific context, having crossed analysis on the digital ID issue, it describes the different technical and legal approaches to protect digital identities with a focus on authentication systems, identity federation techniques and privacy preservation solutions.

The limitations of these solutions and research issues in this field are also discussed to further understand the changes that are taking place.

Contents
1. Digital Identity.
2. The Management of Identity by the Federation.

La gestion des identités numériques – ISBN: 9781784050566
The above title is published in French by ISTE Editions (www.iste-editions.fr)

Chinese Cybersecurity and Defense
Edited by Daniel Ventre, CNRS, France

Coordinated by Jean-Charles Pomerol

ISBN: 9781848216143 • 2014 • 320 pages • USD 140.00 • ISTE-WILEY

Contributions from international researchers offer differing perspectives on China, its cybersecurity and cyberdefense strategies and policies. These questions have today acquired a major strategic dimension: is cyberspace in the process of modifying the arena of international relations? How does China understand cybersecurity and cyberdefense? What are the issues and challenges for them? What is China’s place in the global cyberspace?

All these topics are covered by the authors of this book.

Contents
2. PLA Views on Informationized Warfare, Information Warfare and Information Operations.
3. China’s Adaptive Internet Management Strategy after the Emergence of Social Networks.
4. India’s Cybersecurity – The Landscape.
5. China and Southeast Asia: Offline Information Penetration and Suspicions of Online Hacking.
6. Impact of Mongolia’s Choices in International Politics on Cybersecurity.
7. China-Iran-Russia – A Cybercommunity of Information?
Traditional topographic databases, usually created from aerial or satellite imagery, provide a simplified three-dimensional (3D) model of our urban environment which can be used for a number of applications, such as town planning, risk prevention and mobility management. However, in the case of representing and analyzing outstanding sites like monuments, works of art or archeological sites, these databases are insufficient and other ways of acquiring and processing data need to be employed.

This book presents a state-of-the-art of the methods specifically adapted to outstanding sites and the research currently being carried out in this area. The methods addressed range from lasergrammetry to current dense correlation techniques using images as well as traditional photogrammetry.

**Contents**

1. Specific Requirements for the 3D Digitization of Outstanding Sites.
2. 3D Digitization Using Images.
3. 3D Digitization by Laser Scanner.
4. Complementarity of Techniques.
5. Point Cloud Processing.

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**Numérisation 3D de bâtiments** – ISBN: 9781784050344

*The above title is published in French by ISTE Editions (www.iste-editions.fr)*

**Spatio-temporal Approaches**

Geographic Objects and Change Process

Hélène Mathian and Lena Sanders, UMR Géographie-cités, Paris, France

**Contents**

1. Building Objects in Time.
2. From Empirical Questioning to Spatio-Temporal Modeling.

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**Objets géographiques et processus de changement** – ISBN: 9781784050313

*The above title is published in French by ISTE Editions (www.iste-editions.fr)*
Recommender Systems
Edited by Gérald Kembellec, University of Lille 3, Ghislaine Chartron, CNAM, Imad Saleh, University of Paris 8, France

Coordinated by Jean-Charles Pomerol

ISBN: 9781848217683 • 2014 • 254 pages • USD 105.00 • ISTE-WILEY

In a cross-disciplinary approach, the authors of this book bring together contributions linking the information and communication sciences, marketing, sociology, mathematics and IT.

They discuss the understanding of models subjacent to recommender systems and detail their position within a historic perspective. The book also analyzes their development in the supply of content and evaluates their impact on the behavior of users.

Contents

3. Recommender Systems and Social Networks: What Are the Implications or Digital Marketing?
5. iSoNTRE: Intelligent Transformer of Social Networks into a Recommendation Engine Environment.

The above title is published in French by ISTE Editions (www.iste-editions.fr)

Participatory Mapping
New Data, New Cartography
Jean-Christophe Plantin, University of Michigan, USA and Université de Technologie de Compiègne, France

Coordinated by Fabrice Papy

ISBN: 9781848216617 • 2014 • 176 pages • USD 90.00 • ISTE-WILEY

The social and technical properties of the Web redefine how maps are created, published and used online. This book characterizes these contemporary forms of Web-based cartography. It draws a comparison with both previous analogical and digital maps, it characterizes the new online cartographers, and it shows how maps interact with other Web applications and sources of data.

The case study of the Fukushima-Daiichi power plant disaster in March 11, 2011 provides a vivid example of how these maps can sustain the involvement of citizens during a crisis. By presenting the international collaboration of mapmakers who created online radiation maps, this case study illustrates how science and politics are inseparable in Web-based maps.

La cartographie numérique – ISBN: 9781784050191
The above title is published in French by ISTE Editions (www.iste-editions.fr)
MOOCs
Design, Use and Business Models
Jean-Charles Pomerol, France
Yves Epelboin, France
Claire Thoury, Pierre and Marie Curie University, Paris, France

MOOCs (Massive Online Open Courses) are shaking up the traditional forms of primary and continuing education and training. These new distance teaching tools which take advantage of the Web and social network revolution are making us think again about how we teach and learn.

Contents
1. What is a MOOC?
2. How to Construct a MOOC.
3. A MOOC for Whom and for What Purposes?
4. Financing and Development of MOOCs.
5. MOOCs and Higher Education.
6. Conclusions: What Does the Future Hold for MOOCs?

Information Evaluation
Philippe Capet and Thomas Delavallade, Thales Group, France

Beyond the military context, the book reveals ways to evaluate information for the good of other fields such as economic intelligence, and, more globally, the informational monitoring by governments and businesses.

Contents
1. Information: Philosophical Analysis and Strategic Applications.
2. Epistemic Trust.
3. The Fundamentals of Intelligence.
8. When Reported Information is Second Hand.

Cybercrime and Cyberwarfare
Igor Bernik, University of Maribor, Slovenia

In order to enable general understanding and to foster the implementation of necessary support measures in organizations, this book describes the fundamental and conceptual aspects of cyberspace abuse. These aspects are logically and reasonably discussed in the fields related to cybercrime and cyberwarfare. The book illustrates differences between the two fields, perpetrators’ activities, as well as the methods of investigating and fighting against attacks committed by perpetrators operating in cyberspace.

Contents
1. Cybercrime. 
2. Cyberwarfare.
Information Retrieval in Digital Environments

Jérôme Dinet, University of Lorraine, France

Coordinated by Fabrice Papy

ISBN: 9781848216983 • 2014 • 176 pages • USD 95.00 • ISTE-WILEY

The author of this book presents a summary of work undertaken over several years relative to the behaviors and cognitive processes involved in information retrieval in digital environments. He presents several examples of theoretical models and studies to better understand the difficulties, behaviors and strategies of individuals searching for information in digital environments.

Contents
1. Information Retrieval in Digital Environments: Debate and Scientific Directions.
2. Conceptual and Methodological Approaches to Information Retrieval in Digital Environments.

La recherche d'information dans les environnements numériques – ISBN: 9781784050184
The above title is published in French by ISTE Editions (www.iste-editions.fr)

Crowdsourcing

One Step Beyond
Jean-Fabrice Lebraty and Katia Lobre-Lebraty, IAE, Lyon 3 University, France

Coordinated by Jean-Charles Pomerol

ISBN: 9781848214668 • 2013 • 144 pages • USD 70.00 • ISTE-WILEY

Crowdsourcing is a relatively recent phenomenon that only appeared in 2006, but it continues to grow and diversify (crowdfunding, crowdcontrol, etc.). This book aims to review this concept and show how it leads to the creation of value and new business opportunities.

Contents
2. Crowdsourcing: A New Form of Externalization.
3. Crowdsourcing and Value Creation.
4. Forms of Crowdsourcing.
5. The Dangers of Crowdsourcing.

Crowdsourcing – ISBN: 97817840500085
The above title is published in French by ISTE Editions (www.iste-editions.fr)
Geographical Information Retrieval in Textual Corpora
Christian Sallaberry, University of Pau and Pays de l'Adour, France

Coordinated by Anne Ruas

ISBN: 9781848215962 • 2013 • 144 pages • USD 70.00 • ISTE-WILEY

This book addresses the field of geographic information extraction and retrieval from textual documents. Geographic information retrieval is a rapidly emerging subject, a trend fostered by the growing power of the Internet and the emerging possibilities of data dissemination. The author provides a rich bibliographical study of the current approaches focused on the modeling and retrieval of spatial and temporal information in textual documents, and similarity measures developed thus far in the literature.

Contents
1. Access by Geographic Content to Textual Corpora: What Orientations?
2. Spatial and Temporal Information Retrieval in Textual Corpora.

Recherche d'information géographique dans des corpus textuels – ISBN: 9781784050122
The above title is published in French by ISTE Editions (www.iste-editions.fr)

Cyber Conflict
Competing National Perspectives
Edited by Daniel Ventre, CNRS, France

Information Systems, Web and Pervasive Computing Series

ISBN: 9781848213500 • 2012 • 352 pages • USD 145.00 • ISTE-WILEY

Cyber Conflict analyzes the processes of information warfare and cyber warfare through historical, operational and strategic perspectives of cyber attack.

Contents
2. Cuba: Towards an Active Cyber-defense.
3. French Perspectives on Cyber-conflict.
8. A Slovenian Perspective on Cyber Warfare.
10. Conclusion.
Textual Information Access

Statistical Models
Edited by Eric Gaussier, Joseph Fourier University, Grenoble and François Yvon, Paris Sud University Orsay, France

Contents

Part 1. Information Retrieval
2. Learnable Ranking Models for Automatic Text Summarization and Information Retrieval.

Part 2. Classification and Clustering
3. Logistic Regression and Text Classification.

Part 3. Multilingualism

Part 4. Emerging Applications
8. Information Mining: Methods and Interfaces for Accessing Complex Information.

ISBN: 9781848213227 • 2012 • 448 pages • USD 175.00 • ISTE-WILEY

Innovative Software Development in GIS

Edited by Bénédicte Bucher, COGIT-IGN and Florence Le Ber, ENGEES, France

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Complete table of contents at http://www.iste.co.uk/index.php?f=a& ACTION=View&id=492

Audiovisual Archives

Digital Text and Discourse Analysis
Peter Stockinger, Fondation Maison des Sciences de l'Homme, Paris, France

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<td>Pirmin Lemberger and Médéric Morel, Alcyonix, SQLI's Group Consulting, France</td>
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<td>2011</td>
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Edited by Stéphane Roche, Laval University, Quebec and Claude Caron, University of Sherbrooke, Quebec, Canada
9781848210851 • 2009 • 368 pages • USD 150.00

## Spatial Interpolation for Climate Data
*The Use of GIS in Climatology and Meteorology*
Edited by Hartwig Dobesch, Institute of Meteorology and Geodynamics, Vienna, Austria, Pierre Dumolard, Joseph Fourier University, Grenoble, France and Izabela Dyras, Institute of Meteorology and Water Management, Krakow, Poland
9781905209705 • 2007 • 328 pages • USD 160.00

## Spatial Management of Risks
Edited by Gérard Brugnot, CEMAGREF, Grenoble, France
9781848210462 • 2008 • 272 pages • USD 140.00

## Operations Research and Networks
*Methods for a Spatial Analysis*
Edited by Gerd Finke, Joseph Fourier University, Grenoble, France
9781848210929 • 2008 • 288 pages • USD 110.00

## Geomarketing
*Methods and Strategies in Spatial Marketing*
Edited by Gérard Cliquet, University of Rennes 1, France
9781905209071 • 2006 • 328 pages • USD 155.00

## The Modeling Process in Geography
*From Determinism to Complexity*
Edited by Yves Guermond, University of Rouen, France
9781848210875 • 2008 • 376 pages • USD 165.00

## Fundamentals of Spatial Data Quality
Edited by Rodolphe Devillers, Geography Department of Memorial University of Newfoundland, Canada and Robert Jeansoulin, Center of Mathematics and Computer Sciences of University of Provence, France
9781905209569 • 2006 • 312 pages • USD 95.00

## Advanced Mapping of Environmental Data
*Geostatistics, Machine Learning and Bayesian Maximum Entropy*
Edited by Mikhail Kanevski, Institute of Geomatics and Analysis of Risk, University of Lausanne, Switzerland
9781848210608 • 2008 • 328 pages • USD 165.00

## Looking Back and Going Forward in IT
Jean-Pierre Corniou, CIO Renault, France
9781905209583 • 2006 • 200 pages • USD 95.00

## Models in Spatial Analysis
Edited by Lena Sanders, CNRS, University of Paris 7, France
9781905209095 • 2007 • 352 pages • USD 180.00
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