Chapter 3 Collaborative Filtering Springer

CoopIS, DOA, and ODBASE : OTM Confederated International Conferences, CoopIS, DOA, and ODBASE 2004, Agia Napa, Cyprus, October 25-29, 2004 : Proceedings
Web Mining: From Web to Semantic Web
Collaborative and Social Information Retrieval and Access: Techniques for Improved User Modeling
First European Web Mining Forum, EWMF 2003, Cavtat-Dubrovnik, Croatia, September 22, 2003, Revised Selected and Invited Papers
R Data Analysis Projects
How to build and deploy AI business projects
Active Media Technology
Neural Networks and Deep Learning
Mathematical Foundations of Big Data Analytics
Methods and Strategies of Web Personalization
11th International Conference, UM 2007, Corfu, Greece, July 25-29, 2007, Proceedings
PRICAI 2000 Topics in Artificial Intelligence
The Adaptive Web
Group Recommender Systems
Third International Conference, DaWaK 2001 Munich, Germany September 5-7, 2001 Proceedings
Proceedings of the International Conference on Frontiers of Intelligent Computing: Theory and Applications (FICTA) 2013
Web Personalization in Intelligent Environments
Techniques for Improved User Modeling
Information Intelligence, Systems, Technology and Management
Service Computing: Concept, Method and Technology
Advances in Data Mining
32nd European Conference on IR Research, ECIR 2010, Milton Keynes, UK, March 28-31, 2010. Proceedings
Second International Conference, AH 2002 Malaga, Spain, May 29 - 31, 2002 Proceedings
Applications in E-Commerce, Medicine, and Knowledge Management
Advances in Information Retrieval
Collaborative Information Seeking
AI Blueprints
Advanced Technologies, Systems, and Applications VI
Data Warehousing and Knowledge Discovery
6th Pacific Rim International Conference on Artificial Intelligence Melbourne, Australia, August 28 - September 1, 2000 Proceedings
On the Move to Meaningful Internet Systems 2004
4th International Conference, AAIM 2008, Shanghai, China, June 23-25, 2008, Proceedings
Quality Issues in the Management of Web Information
Collaborative Filtering Using Data Mining and Analysis
Recommender Systems for Learning
An Introduction
SocProS 2018, Volume 2
ECSCW 2001
Systems and Technologies
New Trends in Applied Artificial Intelligence

CAMILLE KRUEGER

CoopIS, DOA, and ODBASE : OTM Confederated International Conferences, CoopIS, DOA, and ODBASE 2004, Agia Napa, Cyprus, October 25-29, 2004 : Proceedings Springer Science & Business Media
This open access book presents nine outstanding doctoral dissertations in Information Technology from the Department of Electronics, Information and Bioengineering, Politecnico di Milano, Italy. Information Technology has always been highly interdisciplinary, as many aspects have to be considered in IT systems. The doctoral studies program in IT at Politecnico di Milano emphasizes this interdisciplinary nature, which is becoming more and more important in recent technological advances, in collaborative projects, and in the education of young researchers. Accordingly, the focus of advanced research is on pursuing a rigorous approach to specific research topics starting from a broad background in various areas of Information Technology, especially Computer Science and Engineering, Electronics, Systems and Controls, and Telecommunications. Each year, more than 50 PhDs graduate from the program. This book gathers the outcomes of the nine best theses defended in 2018-19 and selected for the IT PhD Award. Each of the nine authors provides a chapter summarizing his/her findings, including an introduction, description of methods, main achievements and future work on the topic. Hence, the book provides a cutting-edge overview of the latest research trends in Information Technology at Politecnico di Milano, presented in an easy-to-read format that will also appeal to non-specialists.
Web Mining: From Web to Semantic Web Springer Nature
This book constitutes the refereed proceedings of the 20th International Conference on Industrial and Engineering Applications of Artificial Intelligence and Expert Systems, IEA/AIE 2007, held in Kyoto, Japan. Coverage includes text processing, fuzzy system applications, real-world interaction, data mining, machine learning chance discovery and social networks, e-commerce, heuristic search application systems, and other applications.

Collaborative and Social Information Retrieval and Access: Techniques for Improved User Modeling Springer
This book constitutes the refereed proceedings of the Second International Conference on Adaptive Hypermedia and Adaptive Web-Based Systems, AH 2002, held in Malaga, Spain, in May 2002. The 33 revised full papers and 23 short papers presented were carefully reviewed and selected from 109 submissions. Also included are three invited contributions, 30 posters, and 5 presentations given at the associated doctoral constortium. Among the topics covered are adaptive hypertext and hypermedia, user modeling, adaptive learning, adaptive tutoring systems, information retrieval, educational hypermedia systems, Web adaption, adaptive navigation, adaption and personalization.
First European Web Mining Forum, EWMF 2003, Cavtat-Dubrovnik, Croatia, September 22, 2003, Revised Selected and Invited Papers Springer
This book constitutes the refereed proceedings of the 32nd annual European Conference on Information Retrieval Research, ECIR 2010, held in Milton Keynes, UK, in March 2010. The 44 revised full papers and 23 poster papers presented together with the keynote lecture, 5 tool demonstrations and the abstracts of 3 invited lectures were carefully reviewed and selected from 202 full research paper submissions and 73 poster/demo submissions. The papers are organized in topical sections on NLP and text mining, Web IR, evaluation, multimedia IR, distributed IR and performance issues, IR theory and formal models, personalization and recommendation, domain-specific IR and CLIR, as well as user issues.
R Data Analysis Projects The Adaptive WebMethods and Strategies of Web Personalization
At first sight, the concept of web personalization looks deceivingly simple. A web personalization system is a software component that collects information on visitors to a web site and leverages this knowledge to deliver them the right content, tailoring presentation to the user's needs. All over the world, web designers and web content managers rely on web personalization solutions to improve the effectiveness and - ability of their web-based applications. Still, the scientific foundation of web personalization remains a controversial issue. Practitioners know very well that when properly implemented, personalization del-ers a much better user experience; but when it is poorly implemented, personalization may backfire and even distract the user's attention away from some useful (and co- ly-to-develop) enriched content. In other words, tailoring content, and varying it routinely, may make a site more attractive; but an unstable site look can have a negative impact on the overall m- sage. Everybody seems to agree that this is a real danger; but there are specific qu- tions that are much harder to answer convincingly.
How to build and deploy AI business projects Academic Press
The essential blueprints and workflow you need to build successful AI business applications Key Features Learn and master the essential blueprints to program AI for real-world business applications Gain insights into how modern AI and machine learning solve core business challenges Acquire practical techniques and a workflow that can build AI applications using state-of-the-art software libraries Work with a practical, code-based strategy for creating successful AI solutions in your business Book Description AI Blueprints gives you a working framework and the techniques to build your own successful AI business applications. You'll learn across six business scenarios how AI can solve critical challenges with state-of-the-art AI software libraries and a well thought out workflow. Along the way you'll discover the practical techniques to build AI business applications from first design to full coding and deployment. The AI blueprints in this book solve key business scenarios. The first blueprint uses AI to find solutions for building plans for cloud computing that are on-time and under budget. The second blueprint involves an AI system that continuously monitors social media to gauge public feeling about a topic of interest - such as self-driving cars. You'll learn how to approach AI business problems and apply blueprints that can ensure success. The next AI scenario shows you how to approach the problem of creating a recommendation engine and monitoring how those recommendations perform. The fourth blueprint shows you how to use deep learning to find your business logo in social media photos and assess how people interact with your products. Learn the practical techniques involved and how to apply these blueprints intelligently. The fifth blueprint is about how to best design a 'trending now' section on your website, much like the one we know from Twitter. The sixth blueprint shows how to create helpful chatbots so that an AI system can understand customers' questions and answer them with relevant responses. This book continuously demonstrates a working framework and strategy for building AI business applications. Along the way, you'll also learn how to prepare for future advances in AI. You'll gain a workflow and a toolbox of patterns and techniques so that you can create your own smart code. What you will learn An essential toolbox of blueprints and advanced techniques for building AI business applications How to design and deploy AI applications that meet today's business needs A workflow from first design stages to practical code solutions in your next AI projects Solutions for AI projects that involve social media analytics and recommendation engines Practical projects and techniques for sentiment analysis and helpful chatbots A blueprint for AI projects that recommend products based on customer purchasing habits How to prepare yourself for the next decade of AI and machine learning advancements Who this book is for Programming AI Business Applications provides an introduction to AI with real-world examples. This book can be read and understood by programmers and students without requiring previous AI experience. The projects in this book make use of Java and Python and several popular and state-of-the-art opensource AI libraries.
Active Media Technology ScholarlyEditions
This book covers both classical and modern models in deep learning. The primary focus is on the theory and algorithms of deep learning. The theory and algorithms of neural networks are particularly important for understanding important concepts, so that one can understand the important design concepts of neural architectures in different applications. Why do neural networks work? When do they work better than off-the-shelf machine-learning models? When is depth useful? Why is training neural networks so hard? What are the pitfalls? The book is also rich in discussing different applications in order to give the practitioner a flavor of how neural architectures are designed for different types of problems. Applications associated with many different areas like recommender systems, machine translation, image captioning, image classification, reinforcement-learning based gaming, and text analytics are covered. The chapters of this book span three categories: The basics of neural networks: Many traditional machine learning models can be understood as special cases of neural networks. An emphasis is placed in the first two chapters on understanding the relationship between traditional machine learning and neural networks. Support vector machines, linear/logistic regression, singular value decomposition, matrix factorization, and recommender systems are shown to be special cases of neural networks. These methods are studied together with recent feature engineering methods like word2vec.

Fundamentals of neural networks: A detailed discussion of training and regularization is provided in Chapters 3 and 4. Chapters 5 and 6 present radial-basis function (RBF) networks and restricted Boltzmann machines. Advanced topics in neural networks: Chapters 7 and 8 discuss recurrent neural networks and convolutional neural networks. Several advanced topics like deep reinforcement learning, neural Turing machines, Kohonen self-organizing maps, and generative adversarial networks are introduced in Chapters 9 and 10. The book is written for graduate students, researchers, and practitioners. Numerous exercises are available along with a solution manual to aid in classroom teaching. Where possible, an application-centric view is highlighted in order to provide an understanding of the practical uses of each class of techniques.

Neural Networks and Deep Learning Springer Science & Business Media

This book constitutes the proceedings of the 36th European Conference on IR Research, ECIR 2014, held in Amsterdam, The Netherlands, in April 2014. The 33 full papers, 50 poster papers and 15 demonstrations presented in this volume were carefully reviewed and selected from 288 submissions. The papers are organized in the following topical sections: evaluation, recommendation, optimization, semantics, aggregation, queries, mining social media, digital libraries, efficiency, and information retrieval theory. Also included are 3 tutorial and 4 workshop presentations.

Mathematical Foundations of Big Data Analytics Springer

Schmidt and Bannon (1992) introduced the concept of common information space by contrasting it with technical conceptions of shared information: Cooperative work is not facilitated simply by the provisioning of a shared database, but rather requires the active construction by the participants of a common information space where the meanings of the shared objects are debated and resolved, at least locally and temporarily. (Schmidt and Bannon, p. 22) A CIS, then, encompasses not only the information but also the practices by which actors establish its meaning for their collective work. These negotiated understandings of the information are as important as the availability of the information itself: The actors must attempt to jointly construct a common information space which goes beyond their individual personal information spaces. . . . The common information space is negotiated and established by the actors involved. (Schmidt and Bannon, p. 28) This is not to suggest that actors' understandings of the information are identical; they are simply "common" enough to coordinate the work. People understand how the information is relevant for their own work. Therefore, individuals engaged in different activities will have different perspectives on the same information. The work of maintaining the common information space is the work that it takes to balance and accommodate these different perspectives. A "bug" report in software development is a simple example. Software developers and quality assurance personnel have access to the same bug report information. However, access to information is not sufficient to coordinate their work.

Methods and Strategies of Web Personalization Springer

This book presents papers describing selected projects on the topic of data mining in fields like e commerce, medicine, and knowledge management. The objective is to report on current results and at the same time to give a review on the present activities in this field in Germany. An effort has been made to include the latest scientific results, as well as lead the reader to the various fields of activity and the problems related to them. Knowledge discovery on the basis of web data is a wide and fast growing area. E commerce is the principal theme of motivation in this field, as companies invest large sums in the electronic market, in order to maximize their profits and minimize their risks. Other applications are telelearning, teleteaching, service support, and citizen information systems. Concerning these applications, there is a great need to understand and support the user by means of recommendation systems, adaptive information systems, as well as by personalization. In this respect Giudici and Blanc present in their paper procedures for the generation of associative models from the tracking behavior of the user. Perner and Fiss present in their paper a strategy for intelligent e marketing with web mining and personalization. Methods and procedures for the generation of associative rules are presented in the paper by Hipp, Güntzer, and Nakhaeidizadeh.

11th International Conference, UM 2007, Corfu, Greece, July 25-29, 2007, Proceedings Springer Nature

This book covers applications of machine learning in artificial intelligence. The specific topics covered include human language, heterogeneous and streaming data, unmanned systems, neural information processing, marketing and the social sciences, bioinformatics and robotics, etc. It also provides a broad range of techniques that can be successfully applied and adopted in different areas. Accordingly, the book offers an interesting and insightful read for scholars in the areas of computer vision, speech recognition, healthcare, business, marketing, and bioinformatics.

PRICAI 2000 Topics in Artificial Intelligence IGI Global

Issues in Artificial Intelligence, Robotics and Machine Learning: 2013 Edition is a ScholarlyEditions™ book that delivers timely, authoritative, and comprehensive information about Expert Systems. The editors have built Issues in Artificial Intelligence, Robotics and Machine Learning: 2013 Edition on the vast information databases of ScholarlyNews.™ You can expect the information about Expert Systems in this book to be deeper than what you can access anywhere else, as well as consistently reliable, authoritative, informed, and relevant. The content of Issues in Artificial Intelligence, Robotics and Machine Learning: 2013 Edition has been produced by the world's leading scientists, engineers, analysts, research institutions, and companies. All of the content is from peer-reviewed sources, and all of it is written, assembled, and edited by the editors at ScholarlyEditions™ and available exclusively from us. You now have a source you can cite with authority, confidence, and credibility. More information is available at http://www.ScholarlyEditions.com/.

The Adaptive Web Springer

This second edition of a well-received text, with 20 new chapters, presents a coherent and unified repository of recommender systems' major concepts, theories, methodologies, trends, and challenges. A variety of real-world applications and detailed case studies are included. In addition to wholesale revision of the existing chapters, this edition includes new topics including: decision making and recommender systems, reciprocal recommender systems, recommender systems in social networks, mobile recommender systems, explanations for recommender systems, music recommender systems, cross-domain recommendations, privacy in recommender systems, and semantic-based recommender systems. This multi-disciplinary handbook involves world-wide experts from diverse fields such as artificial intelligence, human-computer interaction, information retrieval, data mining, mathematics, statistics, adaptive user interfaces, decision support systems, psychology, marketing, and consumer behavior. Theoreticians and practitioners from these fields will find this reference to be an invaluable source of ideas, methods and techniques for developing more efficient, cost-effective and accurate recommender systems.

Group Recommender Systems Springer Science & Business Media

This book constitutes the refereed proceedings of the Third

International Conference on Data Warehousing and Knowledge Discovery, DaWaK 2001, held in Munich, Germany in September 2001. The 33 revised full papers presented together with one invited paper were carefully reviewed and selected from more than 90 submissions. The papers are organized in topical sections on association rules, mining temporal patterns, data mining techniques, collaborative filtering and Web mining, visualization and matchmaking, development of data warehouses, maintenance of data warehouses, OLAP, and distributed data warehouses.

Third International Conference, DaWaK 2001 Munich, Germany September 5-7, 2001 Proceedings Springer

This two-volume book presents the outcomes of the 8th International Conference on Soft Computing for Problem Solving, SocProS 2018. This conference was a joint technical collaboration between the Soft Computing Research Society, Liverpool Hope University (UK), and Vellore Institute of Technology (India), and brought together researchers, engineers and practitioners to discuss thought-provoking developments and challenges in order to select potential future directions. The book highlights the latest advances and innovations in the interdisciplinary areas of soft computing, including original research papers on algorithms (artificial immune systems, artificial neural networks, genetic algorithms, genetic programming, and particle swarm optimization) and applications (control systems, data mining and clustering, finance, weather forecasting, game theory, business and forecasting applications). It offers a valuable resource for both young and experienced researchers dealing with complex and intricate real-world problems that are difficult to solve using traditional methods.

Proceedings of the International Conference on Frontiers of Intelligent Computing: Theory and Applications (FICTA) 2013 Springer

Internet usage has become a normal and essential aspect of everyday life. Due to the immense amount of information available on the web, it has become obligatory to find ways to sift through and categorize the overload of data while removing redundant material. Collaborative Filtering Using Data Mining and Analysis evaluates the latest patterns and trending topics in the utilization of data mining tools and filtering practices. Featuring emergent research and optimization techniques in the areas of opinion mining, text mining, and sentiment analysis, as well as their various applications, this book is an essential reference source for researchers and engineers interested in collaborative filtering.

Web Personalization in Intelligent Environments Springer Nature

This book constitutes the refereed proceedings of the 11th International Conference on User Modeling, UM 2007, held in Corfu, Greece in July 2007. Coverage includes evaluating user/student modeling techniques, data mining and machine learning for user modeling, user adaptation and usability, modeling affect and meta-cognition, as well as intelligent information retrieval, information filtering and content personalization.

Techniques for Improved User Modeling IGI Global

In this textbook, basic mathematical models used in Big Data Analytics are presented and application-oriented references to relevant practical issues are made. Necessary mathematical tools are examined and applied to current problems of data analysis, such as brand loyalty, portfolio selection, credit investigation, quality control, product clustering, asset pricing etc. – mainly in an economic context. In addition, we discuss interdisciplinary applications to biology, linguistics, sociology, electrical engineering, computer science and artificial intelligence. For the models, we make use of a wide range of mathematics – from basic disciplines of numerical linear algebra, statistics and optimization to more specialized game, graph and even complexity theories. By doing so, we cover all relevant techniques commonly used in Big Data Analytics.Each chapter starts with a concrete practical problem whose primary aim is to motivate the study of a particular Big Data Analytics technique. Next, mathematical results follow – including important definitions, auxiliary statements and conclusions arising. Case-studies help to deepen the acquired knowledge by applying it in an interdisciplinary context. Exercises serve to improve understanding of the underlying theory. Complete solutions for exercises can be consulted by the interested reader at the end of the textbook; for some which have to be solved numerically, we provide descriptions of algorithms in Python code as supplementary material.This textbook has been recommended and developed for university courses in Germany, Austria and Switzerland.

Information Intelligence, Systems, Technology and Management Springer Science & Business Media

Today’s complex, information-intensive problems often require people to work together. Mostly these tasks go far beyond simply searching together; they include information lookup, sharing, synthesis, and decision-making. In addition, they all have an end-goal that is mutually beneficial to all parties involved. Such “collaborative information seeking” (CIS) projects typically last several sessions and the participants all share an intention to contribute and benefit. Not surprisingly, these processes are highly interactive. Shah focuses on two individually well-understood notions: collaboration and information seeking, with the goal of bringing them together to show how it is a natural tendency for humans to work together on complex tasks. The first part of his book introduces the general notions of collaboration and information seeking, as well as related concepts, terminology, and frameworks; and thus provides the reader with a comprehensive treatment of the concepts underlying CIS. The second part of the book details CIS as a standalone domain. A series of frameworks, theories, and models are introduced to provide a conceptual basis for CIS. The final part describes several systems and applications of CIS, along with their broader implications on other fields such as computer-supported cooperative work (CSCW) and human-computer interaction (HCI). With this first comprehensive overview of an exciting new research field, Shah delivers to graduate students and researchers in academia and industry an encompassing description of the technologies involved, state-of-the-art results, and open challenges as well as research opportunities.

Service Computing: Concept, Method and Technology Packt Publishing Ltd

This volume contains the papers presented at the Second International Conference on Frontiers in Intelligent Computing: Theory and Applications (FICTA-2013) held during 14-16 November 2013 organized by Bhubaneswar Engineering College (BEC), Bhubaneswar, Odisha, India. It contains 63 papers focusing on application of intelligent techniques which includes evolutionary computation techniques like genetic algorithm, particle swarm optimization techniques, teaching-learning based optimization etc for various engineering applications such as data mining, Fuzzy systems, Machine Intelligence and ANN, Web technologies and Multimedia applications and Intelligent computing and Networking etc.