Description: This book is an essential reference to cutting-edge issues and future directions in information retrieval.

Information retrieval (IR) can be defined as the process of representing, managing, searching, retrieving, and presenting information. Good IR involves understanding information needs and interests, developing an effective search technique, system, presentation, distribution and delivery. The increased use of the Web and wider availability of information in this environment led to the development of Web search engines. This change has brought fresh challenges to a wider variety of users' needs, tasks, and types of information.

Today, search engines are seen in enterprises, on laptops, in individual websites, in library catalogues, and elsewhere. Information Retrieval: Searching in the 21st Century focuses on core concepts, and current trends in the field.

This book focuses on:
- Information Retrieval Models
- User-centred Evaluation of Information Retrieval Systems
- Multimedia Resource Discovery
- Image Users' Needs and Searching Behaviour
- Web Information Retrieval
- Mobile Search
- Context and Information Retrieval
- Text Categorisation and Genre in Information Retrieval
- Semantic Search
- The Role of Natural Language Processing in Information Retrieval: Search for Meaning and Structure
- Cross-language Information Retrieval
- Performance Issues in Parallel Computing for Information Retrieval

This book is an invaluable reference for graduate students on IR courses or courses in related disciplines (e.g. computer science, information science, human-computer interaction, and knowledge management), academic and industrial researchers, and industrial personnel tracking information search technology developments to understand the business implications. Intermediate-advanced level undergraduate students on IR or related courses will also find this text insightful. Chapters are supplemented with exercises to stimulate further thinking.

Contents:

Foreword.

Preface.

About the Editors.

List of Contributors.

Introduction.

1 Information Retrieval Models (Djoerd Hiemstra).

1.1 Introduction.

1.2 Exact Match Models.

1.3 Vector Space Approaches.

1.4 Probabilistic Approaches.

1.5 Summary and Further Reading.

2.1 Introduction.
2.2 The MEDLARS Test.
2.3 The Okapi Project.
2.4 The Interactive IR Evaluation Model.
2.5 Summary.

Exercises.
References.

3 Multimedia Resource Discovery (Stefan Rüger).

3.1 Introduction.
3.2 Basic Multimedia Search Technologies.
3.3 Challenges of Automated Visual Indexing.
3.4 Added Services.
3.5 Browsing: Lateral and Geotemporal.
3.6 Summary.

Exercises.
References.

4 Image Users’ Needs and Searching Behaviour (Stina Westman).

4.1 Introduction.
4.2 Image Attributes and Users’ Needs.
4.3 Image Searching Behaviour.
4.4 New Directions for Image Access.
4.5 Summary.

Exercises.
References.

5 Web Information Retrieval (Nick Craswell and David Hawking).

5.1 Introduction.
5.2 Distinctive Characteristics of the Web.
5.3 Three Ranking Problems.
5.4 Other Web IR Issues.
5.5 Evaluation of Web Search Effectiveness.
5.6 Summary.
Exercises.
References.

6 Mobile Search (David Mountain, Hans Myrhaug and Ayse Göker).
6.1 Introduction: Mobile Search – Why Now?
6.2 Information for Mobile Search.
6.3 Designing for Mobile Search.
6.4 Case Studies.
6.5 Summary.
Exercises.
References.

7 Context and Information Retrieval (Ayse Göker, Hans Myrhaug and Ralf Bier).
7.1 Introduction.
7.2 What is Context?
7.3 Context in Information Retrieval.
7.4 Context Modelling and Representation.
7.5 Context and Content.
7.6 Related Topics.
7.7 Evaluating Context-aware IR Systems.
7.8 Summary.
Exercises.
References.

8 Text Categorisation and Genre in Information Retrieval (Stuart Watt).
8.1 Introduction: What is Text Categorisation?
8.2 How to Build a Text Categorisation System.
8.3 Evaluating Text Categorisation Systems.
8.4 Genre: Text Structure and Purpose.
8.5 Related Techniques: Information Filtering.
8.6 Applications of Text Categorisation.
8.7 Summary and the Future of Text Categorisation.
9 Semantic Search (John Davies, Alistair Duke and Atanas Kiryakov).

9.1 Introduction.

9.2 Semantic Web.

9.3 Metadata and Annotations.


9.5 Semantic Annotation of Named Entities.

9.6 Semantic Indexing and Retrieval.

9.7 Semantic Search Tools.

9.8 Summary.

Exercises.

References.

10 The Role of Natural Language Processing in Information Retrieval: Searching for Meaning and Structure (Tony Russell-Rose and Mark Stevenson).

10.1 Introduction.

10.2 Natural Language Processing Techniques.

10.3 Applications of Natural Language Processing in Information Retrieval.

10.4 Discussion.

10.5 Summary.

Exercises.

References.

11 Cross-Language Information Retrieval (Daqing He and Jianqiang Wang).

11.1 Introduction.

11.2 Major Approaches and Challenges in CLIR.

11.3 Identifying Translation Units.

11.4 Obtaining Translation Knowledge.

11.5 Using Translation Knowledge.

11.6 Interactivity in CLIR.

11.7 Evaluation of CLIR Systems.

11.8 Summary and Future Directions.

Exercises.
References.

12 Performance Issues in Parallel Computing for Information Retrieval (Andrew MacFarlane).

12.1 Introduction.

12.2 Why Parallel IR?

12.3 Review of Previous Work.

12.4 Distribution Methods for Inverted File Data.

12.5 Tasks in Information Retrieval.

12.6 A Synthetic Model of Performance for Parallel Information Retrieval.

12.7 Empirical Examination of Synthetic Model.

12.8 Summary and Further Research.

Exercises.

References.

Solutions to Exercises.

Index.


Order by Fax - using the form below

Order by Post - print the order form below and send to

Research and Markets,
Guinness Centre,
Taylors Lane,
Dublin 8,
Ireland.
Fax Order Form
To place an order via fax simply print this form, fill in the information below and fax the completed form to 646-607-1907 (from USA) or +353-1-481-1716 (from Rest of World). If you have any questions please visit
http://www.researchandmarkets.com/contact/

Order Information
Please verify that the product information is correct.

<table>
<thead>
<tr>
<th>Product Name:</th>
<th>Information Retrieval. Searching in the 21st Century</th>
</tr>
</thead>
<tbody>
<tr>
<td>Web Address:</td>
<td><a href="http://www.researchandmarkets.com/reports/2170456/">http://www.researchandmarkets.com/reports/2170456/</a></td>
</tr>
<tr>
<td>Office Code:</td>
<td>SC93JQFG</td>
</tr>
</tbody>
</table>

Product Format
Please select the product format and quantity you require:

**Quantity**

| Hard Copy (Hard Back): | USD 125 + USD 28 Shipping/Handling |

* Shipping/Handling is only charged once per order.

Contact Information
Please enter all the information below in BLOCK CAPITALS

<table>
<thead>
<tr>
<th>Title:</th>
<th>Mr [ ]</th>
<th>Mrs [ ]</th>
<th>Dr [ ]</th>
<th>Miss [ ]</th>
<th>Ms [ ]</th>
<th>Prof [ ]</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Name:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Email Address: *</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job Title:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organisation:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Address:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>City:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Postal / Zip Code:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Country:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phone Number:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fax Number:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Please refrain from using free email accounts when ordering (e.g. Yahoo, Hotmail, AOL)
Payment Information

Please indicate the payment method you would like to use by selecting the appropriate box.

☐ Pay by credit card: You will receive an email with a link to a secure webpage to enter your credit card details.

☐ Pay by check: Please post the check, accompanied by this form, to:

Research and Markets,
Guinness Center,
Taylors Lane,
Dublin 8,
Ireland.

☐ Pay by wire transfer: Please transfer funds to:

Account number 833 130 83
Sort code 98-53-30
Swift code ULSBIE2D
IBAN number IE78ULSB98533083313083
Bank Address Ulster Bank,
27-35 Main Street,
Blackrock,
Co. Dublin,
Ireland.

If you have a Marketing Code please enter it below:

Marketing Code: ________________________________

Please note that by ordering from Research and Markets you are agreeing to our Terms and Conditions at http://www.researchandmarkets.com/info/terms.asp

Please fax this form to:
(646) 607-1907 or (646) 964-6609 - From USA
+353-1-481-1716 or +353-1-653-1571 - From Rest of World