
RUTHVEN, I. and KELLY, D. (eds.). *Interactive information seeking, behaviour and retrieval*. London: Facet Publishing. 2011. 296 pages. ISBN 978-1-85604-707-1. £44.95

This latest book from Facet Publishing in the field of Information and Library Science boldly claims to be the first text to cover information retrieval from an information science perspective. It has a broad scope which encompasses the history and background of information seeking, information behaviour and information retrieval systems, examining different models, techniques and interfaces and pointing to key research in these areas.

The editors have set out to provide an overview of interactive information retrieval, a term which brings together both user-centred and system-centred research and looks at how the user interacts with the information retrieval system and how system design responds to the user interaction. It aims to bring together relevant research in computer science and information science and to encourage collaboration between these hitherto discrete areas of research.

The thirteen chapters consist of contributions from leading researchers and experts from the field of information and computer science research in both academia and industry. The varied fields of expertise of the contributors give the book breadth of coverage but also detailed insight into particular areas, covering the historical background to information retrieval research through to current models and concepts. It includes information seeking behaviour, interaction and retrieval and how studies of human behaviour and cognition can be used in the design and evaluation of information retrieval systems to improve our ability to manage and process information.

In the opening chapter Cool and Belkin provide an excellent concise background to information retrieval, highlighting the growing awareness of how the effectiveness of information retrieval systems and interfaces is dependent on an understanding of human information-seeking behaviour and interaction with search systems. At the same time they stress the value for information science researchers in having an understanding of how search systems are designed and operate. One of the aims of this book is to encourage communication between the two areas by demonstrating that the study of interactive information retrieval is useful for researchers in system design but also for users of information retrieval systems and for evaluation of these systems.

Subsequent chapters examine and compare models of information retrieval and information seeking behaviour and methods of testing and evaluating search systems. Several of the chapters highlight the fact that information retrieval research has tended to focus on the search processes rather than user behaviour or context. Smucker gives a clear explanation of how we represent documents to aid retrieval through manual indexing to sophisticated computer algorithms and this is continued by Rasmussen in his more detailed examination of the interaction between document representation and query presentation and by Little, Brown

and R ger in their chapter on multimedia representation. Interactive processes such as relevance feedback, personalisation, user interaction data, query expansion and web ranking are discussed as well as the problems involved in studying the effectiveness of information retrieval systems. Jarvelin suggests that:

“Evaluating interactive IR for better actor experience and information access (however measured) requires that one systematically examine the contribution of all components and subsystems of the system under scrutiny.”

Throughout the book there are cross-references to related information in other chapters, reinforcing the idea that the various elements involved in information retrieval are interdependent. Some topics will be of more interest to the reader than others depending on the reader’s interests or field of research and although it is possible to dip into individual chapters it can also be read as a cohesive whole. The level at which the chapters are pitched varies with some being relatively easy to understand but others being rather more technical. I think a useful addition would have been a glossary of the terms used in the chapters on system design as these were not always self-evident to anyone not involved in computer science.

As a synthesis of existing research in this area it proves a valuable reference text, providing recommendations for further reading in more depth and an overview of past and current research, but I didn’t feel it added anything new other than to draw together the computer science and information science based areas and to indicate areas for future research. An area which I would have liked to see explored in more depth would be social media interaction as part of the retrieval process which is discussed briefly by Nichols but does not include the growing influence of social networking.

I would certainly agree that this would be a very useful text for students of information and library studies courses as it covers a lot of the basic concepts of indexing and information retrieval as well as looking at different information seeking behaviours such as task-based, user-based and query-based models. The inclusion of studies of the design and evaluation of information retrieval systems and how they interact with the user adds another valuable dimension to an understanding of the information retrieval process.

Sally Reeve
Assistant Information Adviser
University of Brighton
s.reeve@brighton.ac.uk