

BOOK REVIEW / CRITIQUE DE LIVRE

Information representation and retrieval in the digital age. 2nd ed. By Heting Chu. Medford, N.J.: Information Today, Inc., 2010. 320 pages (hard cover). ISBN 978-1-57387-393-2. CAN\$39.60.

Information retrieval (IR) refers to the processes and activities involved in obtaining information from a particular source. Information organization and representation are key components of IR. This book, written by Heting Chu, a professor at the Palmer School of Information Science at Long Island University, aims to provide a comprehensive overview of key concepts and major developments in the research field of information storage and retrieval; the author addresses these concepts using the term “information representation and retrieval (IRR)”. Her research encompasses not only the problems surrounding the storage of information but also how it should be represented to facilitate retrieval. As Chu states in the preface:

Information representation is presented as one necessary component in the process of IR and not treated as a domain parallel to information retrieval...

Chu emphasizes the principles and fundamentals of IR and other related topics, discusses language used in IRR, and examines various aspects of retrieval: retrieval methods, techniques, approaches, models, and systems. Despite spanning six chapters, the author provides only a brief presentation of the topics, strongly indicating a focus on practice rather than theory and an orientation towards information professionals rather than the researcher in the field. Throughout the book, historical context is provided. The book also explains the retrieval of multilingual, multimedia, and hyper-structured information and explores the user dimension and evaluation issues.

The second edition of this work features numerous updates and revisions, including coverage of social tagging, taxonomies, folksonomies, and ontologies (to name a few), reflecting on recent changes in this field. The core areas are dealt with thoroughly in this book; whereas, the related topics are covered only on the surface. Chapters on IR methods, retrieval techniques and models, and internet retrieval systems are well covered; whereas the brevity of the last chapter on artificial intelligence leaves the impression of simplification of the material at hand. This is true

despite this chapter having been expanded from the previous edition to include more related content such as automatic summarization, natural language searching, and the semantic web.

As an introduction to the field, I think Chu’s work presents the reader with a concrete and complete picture of organizing and finding information, an understanding that there are both system and user perspectives of these processes, and an understanding that information exists in several forms of media such as text, image, and sound, each having its own set of challenges of representation and retrieval. In a field so broad and complex, Chu has certainly made her intent clear throughout the entire text, writing with a nontechnical view and in a user-friendly way. Chu uses plain language when introducing most of the concepts in this book to new researchers and students.

The organization of the book and the clarity of presentation allow one to see a bird’s eye view of the field of IR. The table of contents contains a minimal amount of jargon to facilitate easy navigation. The use of tables and figures provides a better understanding of some of the technical content, especially the mathematical and technical expressions used in evaluation measures. Each chapter is written independently followed by references, instead of giving a long reference list at the end of the book, which gives the reader the choice of conducting more in-depth research on a particular topic in the future.

Overall, this book covers the complexity of IRR in a very clear and organized manner. I recommend it as an introductory text in library and information science. The references provided at the end of each chapter also serve as valuable starting points for a more in-depth information search for graduate or doctoral students and librarians choosing research topics in IR.

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