Shifting Information Interactions

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ABSTRACT

Modern information retrieval systems, such as search engines, recommender systems, and conversational agents, are best thought of as interactive systems, that is, systems that interact with and learn from user behavior. The ways in which people interact with information continue to change, with different devices, different presentation formats, and different information seeking scenarios.

These changes give rise to new algorithmic and conceptual questions. For instance, how can we learn to rank good results if the display preferences are not known? How might we automatically generate questions to elicit a user's preferences so that an information retrieval system can adjust its results as efficiently as possible? And how should we understand information seeking dialogues?

The talk is based on joint work with Claudio Di Ciccio, Julia Kiseleva, Harrie Oosterhuis, Filip Radlinski, Kate Revoredo, Anna Sepliarskaia, and Svitlana Vakulenko.

CCS CONCEPTS

• **Information systems** → *Retrieval models and ranking*; *Recommender systems*; • **Computing methodologies** → *Discourse, dialogue and pragmatics*;

KEYWORDS

Interactive systems; Conversational search

BIOGRAPHY

Maarten de Rijke is University Professor of Artificial Intelligence and Information Retrieval at the University of Amsterdam. His research focuses on technology to connect people to information, including search engines, recommender systems, and conversational agents, with over 700 publications.

De Rijke is a member of the Royal Netherlands Academy of Arts and Sciences (KNAW). He serves as the Editor-in-Chief of ACM Transactions on Information Systems (TOIS) and as co-Editor-in-Chief of Foundations and Trends in Information Retrieval.

He is the founding director of the Innovation Center for Artificial Intelligence, a national collaboration between academia and industry. He also served as the director of Amsterdam Data Science, a collaboration between knowledge institutes in the Amsterdam area.

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