Information Retrieval

Design and Sources

Roslina Othman

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INFORMATION RETRIEVAL: DESIGN AND SOURCES

Editor

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20. INDEXING MODELS AND SEARCHING FEATURES: AN OVERVIEW

Roslina Othman

ABSTRACT

This chapter provides an overview on the indexing models and searching features. The probabilistic indexing proposed by Maron and Kuhns in 1960, the indexing probabilistic models of indexing and searching proposed by Robertson *et al* in 1980 and the Darmstadt Indexing Approach proposed by Fuhr in 1989 marked the beginning of indexing models and searching features of IR systems including the commercial online databases. Indexing models currently include semantic-based indexing; while the search features include Boolean operators, phrase, exact match, proximity, subject search, and topic detection and tracking.

20.1 Introduction

This chapter introduces briefly the indexing models and searching features with special reference to today's search engine and commercially available online databases. Indexing models today include semantic-based indexing (ontology-based indexing) focused on improving precision (precision-based indexing) while not significantly deteriorating recall; while the search features maintained Boolean operators with phrase, exact match, proximity and subject search, and inclusion of latest features such as topic detection and tracking.

Ontology-based indexing is built based on knowledge-based representation; while the precision-based indexing on the specificity of the index terms. Topic detection and tracking is meant for enhancing