

Based on Lecture 3.1 "Introduction to Content-Based Recommenders" from University of Minnesota's Introduction to Recommender Systems course, taught by J. Konstan and M. Ekstrand, offered on Coursera Fall 2013

Content-Based RS

Drawbacks

Content-Based Filtering

Stable Preferences

Case-Based Reasoning

Needs well-structured attributes

Needs a good distribution of attributes over items

No surprises

Finds substitutes, not complements

Long-term

Building user profile

Krakatoa Chronicle

Vector of attribute preferences

Item-attribute-based user model

Attribute-based item model

Short-term

Easy to explain

Suggest questions to refine recommendations

Interactive process to elicit preferences and gather cases

Set of relevant attributes

Database of cases

Knowledge-Based Navigation

Self-reporting

Infer from user actions

Infer from explicit ratings

TFIDF

Navigate away from recommended item using attributes

Case-Based with Navigation Interface

Actually, the same

Old good Information Retrieval using attars as terms and user as a search query

Entree system: cafe in one city -> cafe in chicago