HTAi Interest Sub-Group on Information Resources (IRG)
- Business Meeting -

Radisson Blu Plaza Hotel, Oslo, June 15th - 13:30 to 14:30

Classification scheme for Information Retrieval methods

Project partners:
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Information Retrieval is

- not new, but
- much easier than in former days …

“It's not the genius who is 100 years ahead of his time but average man who is 100 years behind it.”

(Robert Musil, Austrian novelist (1880-1942))
Modern Information Retrieval

- started after World war II
- Many recent IR methods have their roots in the 1950s and 1960s

Examples for methods introduction

- 1957 Word frequency statistics
- 1967 Assessment on more than 50 IR methods
- 1969 IR evaluation framework
- 1971 Cluster searching
- 1978 Pearl growing
- 1989 Berry picking

Mid 1990s: IR is an established discipline with sophisticated, internationally recognized methods, terms and definitions.
Background

What’s the problem?

- World-wide introduction of the internet
- Easy (free) access to many biomedical bibliographic databases
- Easy to use search functionalities and search filter introduction

Consequences

- A multitude of additional disciplines (not / less educated in IR / informatics) entered the field of Information Retrieval
- New disciplines / institutions introduced their own terminology
- New terms were created although established terms and definitions already did exist
- New or modified (wrong or incomplete) definitions of existing terms were introduced.
- Attempts started to define methodological standards without knowing resp. ignoring the Mid 1990s state-of-the-art.
To recall some basics of IR

- Multitude of existing methods
- **What counts is the result, not the query / procedure.**
- High-quality IR results do require adequate IR methods and adequate IR competency
- Acceptance of IR competency is the result of applying and disseminating recognized expertise, incl. respecting the competency of precursors.

One important step to recover IR knowledge and to ensure high-quality IR is to collect and disseminate the existing methods, terms and definitions (share common language not creating a “Tower of Babel”). Thus we started preparing a

- Glossary of terms of interest and a
- Classification scheme for information retrieval methods
What we did since the Washington Meeting

First part of the project

The Glossary

1. **Preparing a Glossary of terms** of interest currently incl. 350 Information Retrieval methods terms. Details for each entry:
   - Name of term,
   - Definition,
   - Source/s of definition,
   - Synonym/s,
   - Related term/s,
   - Evaluations / applications (references).

2. **Reviewing and adapting the terms** to the ISO standards syntax requirement on preparing dictionaries.

3. **Preparing a list of search heuristics** (currently about 100)

Publishing the Glossary (ongoing)
What we did since the Washington Meeting

Second part of the project (ongoing)

The Classification scheme

- comprehensive systematic literature search to identify publications on information retrieval methods.
- Building-up the hierarchical classification scheme (main categories and sub-categories) $\Rightarrow$ PubMed MeSH

Example

- **Methods related to the information source**
  - **Databases**
  - Fulltext searching
  - Citations
  - Factual data
  - ...
- Berry picking
- Chaining ((forward, backward)
- Citation searching (forward, backward, bidirectional)
- Citation tracking (forward, backward, bidirectional)
- Cited reference searching
- Co-citation retrieval, author
- Co-citation retrieval, work
- Known-item instantiation search
- Pearl growing
- Snowballing
- ...
Outstanding activities

- Defining keywords e.g. applicable to the SuRe Info tool
- Publishing the Glossary and the Classification scheme
- Reporting and publication writing (e.g. IJTAHC or JMLA).

Takk skal du ha

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