Literature search and source evaluation

ITX8301 Magistriseminar I / MSc Seminar I

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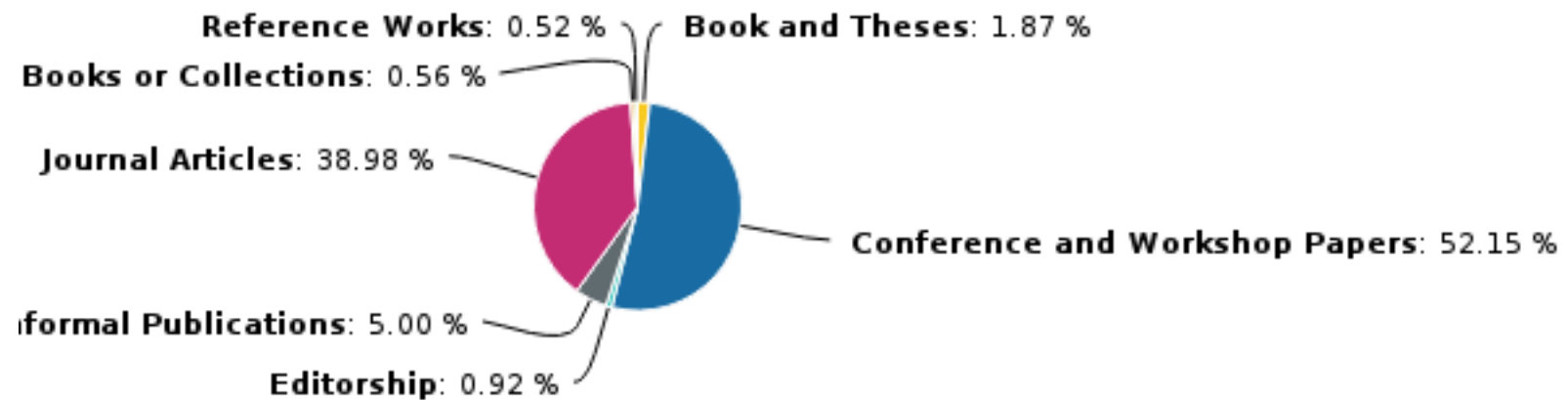
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dblp – Computer Science Bibliography Database

- *dblp* provides open bibliographic information on major computer science journals and proceedings.

- A joint service of the University of Trier and Schloss Dagstuhl.

- https://dblp.uni-trier.de/

- 4483938 publications, 2235853 authors, 5583 conferences, 1608 journals.

dblp – Distribution of Publication Type

Distribution of publication type

Reference Works: 0.52 %

Book and Theses: 1.87 %

Books or Collections: 0.56 %

Journal Articles: 38.98 %

Conference and Workshop Papers: 52.15 %

formal Publications: 5.00 %

Editorship: 0.92 %

Browsing in dblp

- One can browse for:

  - *Authors/Editors* with surname starting letter index

  - *Journals* with starting letter index or *by publisher*

  - *Conferences/workshops* with starting letter index

  - *Series* like CoRR, LNCS, IFIP, EPTCS and several other

  - *Monographs* like books & theses, reference works and edited collections.

Searching in dblp

- Several search options:

    - „Combined dblp search" with e.g., subject keywords and names

    - „Author search"

    - „Venue search" for conferences, symposia, etc

    - „Publication search"

    - „Semantic Scholar search"

Searching in dblp and evaluating results - Example

- Searching with „Multi-robot task planning" in *publication search* found 50 results.
  - Showing them from latest to oldest,
  - Split in publication years,
  - Prioritizing journal articles over conference papers and in turn over informal publications.
  - Option to "refine by author", "refine by venue", "refine by type" and "refine by year", on the right of the page.
  - On the left of each result several options for "exporting record", "sharing record", "view", "asking others" (other search engines and databases)

Scopus

- Scopus by Elsevier is the largest abstract and citation database of peer-reviewed literature: scientific journals, books and conference proceedings.
  - Science, technology, medicine, social sciences, and arts and humanities
  - www.scopus.com

- One can do a normal search for authors, documents and affiliations or browse/search for indexed sources/journals by title.

Searching in Scopus

- Searching for documents with keywords and/or names having the option to do a combined search for "all fields" or for article title, abstract, keywords, or only for authors or only for titles, etc.

- On the left of the results page additional filters can be applied for year, access type, author name, subject area, document type, source (event) type, etc.

- On the right of each result, the authors, publication year, source and citation number can be seen.

Searching in Scopus – example

- Searching with „Multi-robot task planning" in *Documents search* with "title-abstract-keyword" filter found more than 500 results.

- Compared to dblp many results are coming also from several different subject areas.
  - Additional filtering is needed to find the really relevant papers.

- Several options after choosing a paper for exporting formats, downloading, printing, etc.

Other search engines/databases

- Web of Science – www.webofknowledge.com
  - An online subscription-based scientific citation indexing service that provides a comprehensive citation search.
  - Access to multiple databases that reference cross-disciplinary research, which allows for in-depth exploration of specialized sub-fields within an academic or scientific discipline.
  - Access to research papers connected through *linked content citation metrics* from multiple sources within a single interface.

- Other: Google, Google Scholar, CiteSeerX, Semantic Scholar, …