Extract Document Source Citation Network (Core and References)

Menu path

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Description

Extracts the Source citation network from an ISI database.

Each Source in the input database is represented by a node. An edge is drawn between the nodes for two Sources if and only if they are cited by a common document in your dataset.

Core Source vs. Non-Core Source

There is a distinction drawn between Sources contained in your dataset and Sources in general. A Source which is in your dataset is called a "Core Source".

The output network of this algorithm will contain nodes representing even Non-Core Sources. For an algorithm that will represent only Core Sources, see E xtract Document Source Citation Network (Core Only).

Analyses

The output network will include the following summaries of your dataset:

- Node (Source)
    - All actual data from the Sources Table.
    - A generated prettified label identifying this Source.
    - A binary attribute 'IS_FOUND_IN_DOCUMENT' which is 0 when this is an Non-Core Source and is 1 when this is not.
- Edge (Citation)
    - The number of Documents in the target node Source which cited Documents in the source node Source.

Usage Hints

Load an ISI file into the tool, then create a database from it using the ISI database loader.

It is strongly recommended that the database be cleaned before extracting any citation networks from it.

For a quick analysis of a small dataset you may wish to merge together author entities with identical names. For a scientifically sound analysis of a larger dataset, you can find author entity merging suggestions (or manually set your own merging orders from scratch) and perform the merge.

Then, you will probably want to merge together journal entities according to recognized variants.

Finally, you must match references up to documents in your dataset (there are no citations to analyze, otherwise).

Implementation Details

The specific query run by the tool can be found in the source code.

Links

- Extract Document Citation Network (Core Only)
- Load ISI File into Database
- Merge Identical ISI People
- Suggest ISI People Merges
- Create Merging Table
- Merge Entities
- Merge Document Sources
- Match References To Papers

See Also

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