

Extract Document Source Co-Citation Network (Core and References)

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Description

Extracts the journal co-citation network from an ISI database.

Each journal which is the source of a document in the input database or the source of a document referenced in the input database is represented by a node. An edge is drawn between the nodes for two journals if and only if they are cited by a common document in your dataset.

Core Journal vs. Non-Core Journal

There is a distinction drawn between journals which are the source of a document contained in your dataset and journals in general. A journal which is the source of a document in your dataset is called a "core journal".

The output network of this algorithm will contain nodes representing even non-core journals. For an algorithm that will represent only core journals, see [Extract Document Source Citation Network \(Core Only\)](#).

Analyses

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

- Node (Journal)
 - A prettified label identifying this journal.
 - A binary attribute 'is_found_in_document' which is 0 when this is an outside journal and is 1 when this is not.
- Edge (Co-Citation)
 - The number of documents in your dataset which cited documents from both of these journals.
 - This figure is also given with three common normalizations: [Jaccard](#), [cosine](#), and [Dice](#).
 - Publication year of the earliest co-citing document.
 - Publication year of the most recent co-citing document.

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 co-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](#).