

Extract Author Bibliographic Coupling Network

Menu path

Data Preparation > Database > ISI > Extract Author Bibliographic Coupling Network

Description

Extracts the author bibliographic coupling network from an ISI database.

Each person who authored a document in the input database is represented by a node. An edge is drawn between the nodes for two people if and only if they authored documents which cited a common reference.

Analyses

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

- Node (Author)
 - The number of documents in your dataset authored by this person.
- Edge (Bibliographic Coupling)
 - For both people, consider all of the references among all of the documents in your dataset that were authored by them. The total number of distinct references (that is, counted without multiplicity) in common is called 'times_coupled'.
 - This figure is also given with three common normalizations: [Jaccard](#), [cosine](#), and [Dice](#).

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 author information in 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](#).

Implementation Details

The specific query run by the tool can be found in the [source code](#).