Announcement

IsoSearch: Sub-graph Isomorphic Graph Querying System Release
at http://141.217.114.184/IsoSearch/

We are pleased to announce the release of an XSB [1, 2] based sub-graph isomorphic query engine called IsoSearch [3]. The tool can be found at http://141.217.114.184/IsoSearch/. The engine is capable of computing all possible isomorphic subgraphs of a given node labelled data graph and a query graph completely logically. IsoSearch is capable of handling large graph sizes similar to human protein-protein interaction networks [4]. The size of the data and query graph is limited by the capacity of XSB. However, the number of maximum solutions is limited to 100 since we use XSB's findall feature to collect all solutions for a graphical visualization. The solutions are displayed as colored graphs for easy visualization.

The data and query graphs must be in the form of binary predicates called edge and query respectively. These two graphs can be uploaded as text files, or pasted in the interface. An example showing how to run this tool is available in the interface along with a user manual in the help link.

This is a trial release, and we welcome your suggestions and comments on this tool in our IsoSearch blog page. We are especially interested in reports of problems while running your query or any error in our computational procedure. Your suggestions will be used to improve our system.

Publications related to IsoSearch and other projects can be found at our Integration Informatics Lab home page at http://integra.cs.wayne.edu/.

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References:


Note: A bibliographic search for logic based sub-graph isomorphism procedures turned up empty. Any reference to other existing logic based solutions will be appreciated.