

In this section we describe briefly the database creation and the graph query search processes of Network Method. We detail our main contributions: A set of new subgraph query search processing algorithms that implement a fast subgraph search algorithm and on a modified *DAG* data structure. The improved *DAG* data structure is able to process both subgraph and induced subgraph queries.

The Network Method

figure [width=1.0]dag_{construction}_{query}_{processing}6.pdf Schematic of the Network Method : (I) Model Graphs g_1 and g_2 , (II) The Graph Database: A DAG is Constructed using the model graphs g_1 and g_2 and their decomposed subgraphs. *DAG node* 8 contains a subgraph common to model graphs g_1 and g_2 (III) Query Processing: Query Graph g_3 processed on the Graph Database and the matching query graph node IDs shown in braces fig:fig2