Finding Frequent Subgraphs in a Single Graph based on Symmetry

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Abstract

Mining frequent subgraphs is a basic activity that plays an important role in mining graph data. In this paper an algorithm is proposed to find frequent subgraphs in a single large graph that has applications such as protein interactions, social networks, web interactions. One of the key operations required by any frequent subgraph discovery algorithm is to perform graph isomorphism. The proposed algorithm offers mining frequent subgraphs by avoiding the subgraph isomorphism problem through exploiting the symmetry properties present in the given graph.

References

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Index Terms

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Keywords

Frequent subgraph, single graph, graph isomorphism, symmetry