Title: SUBGRAPH ERROR-CORRECTING ISOMORPHISMS FOR SYNTACTIC PATTERN RECOGNITION.

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Abstract:
The structure-preserved error-correcting graph isomorphism proposed by W. H. Tsai and K. S. Fu for matching patterns represented by attributed relational graphs is extended to the case of subgraphs. The resulting subgraph error-correcting isomorphism, which includes the structure-preserved error-correcting graph isomorphism as a special case, is useful for recognizing partially viewed or structurally distorted patterns. After formulating a subgraph error-correcting isomorphism as a state-space tree-search problem, heuristic information useful for speeding up the search is suggested and an ordered-search algorithm is proposed for finding an optimal subgraph error-correcting isomorphism.

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