Abstract

For over three decades the Graph Isomorphism (GI) problem has been extensively studied by many researchers in algorithms and complexity theory. To date, there is no formal proof to classify this problem to be in the class P or the class NP. In this paper, evidence had been proposed of the existing of polynomial time algorithm based on edge classification which can be used to prove that GI is rather in the class P.
Towards A Promising Edge Classification Algorithm for the Graph Isomorphism Problem

- Weisfeiler B. and A. A. Lehman 1968. A Reduction of a Graph to a Canonical Form and an Algebra Arising during this Reduction, (in Russian), Nauchno-Technicheskaya Informatsia, Seriya 2, 9 (1968), 12-16.

Index Terms

Computer Science
Pattern Recognition
Keywords
Edge Classification  Graph Isomorphism  Polynomial Algorithm  Graph Canonization