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Abstract

Minimum number of colors while coloring the vertices of a graph is a massive apprehension of research scholars in the area of soft computing. Method such as Genetic Algorithm (GA) is highly preferred to solve the Graph Coloring problem by the researchers for many years. In this paper, an optimization technique based on Genetic Algorithm and Fuzzy Logic approach is applied for solving Graph Coloring Problem. The selection operator used in the optimization technique has based on Fuzzy logic. The proposed algorithm is tested on standard DIMACS instances. 11 problems from DIMACS dataset are picked and results are compared with known chromatic numbers. It has found that proposed algorithm has solved nearly all of the problem

instances at very good efficiency rate.

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Index Terms

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Keywords

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