Abstract

Timetable problem is well known problem and is extensively studied in the literature. There are many variations of the problem based on the required hard and soft constraints to be satisfied. One variation of the problem is the exam schedule which is similar to the course schedule with different constraints. In this paper, we propose new solution for course and exam schedule problems based on University Credit Hour System (CHS) requirements. Our solution utilizes Graph Coloring (GC) and Genetic Algorithms (GA) as a hybrid solution. The test cases used in this paper show the tradeoff between the running time of the proposed algorithm and its fitness performance compared to GA and GC algorithms.

Reference


Trans Genetic Coloring Approach for Timetabling Problem


Index Terms

Computer Science

Artificial Intelligence

Key words

Time table schedule

Genetic Algorithms

Graph Coloring

Genetic Coloring