

Comparison of bioinspired algorithms applied to the timetabling problem

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Abstract

The problem of timetabling events is present in various organizations such as schools, hospitals, transportation centers. The purpose of timetabling activities at a university is to ensure that all students attend their required subjects in accordance with the available resources. The set of constraints that must be considered in the design of timetables involves students, teachers and infrastructure. This study shows that acceptable solutions are generated through the application of genetic, memetic and immune system algorithms for the problem of timetabling. The algorithms are applied to real instances of the University of Mumbai in India and their results are comparable with those of a human expert.

Palabras clave:

Genetic algorithm, Memetic algorithm, Immune system, Faculty timetabling, Course timetabling