METHOD AND SYSTEM FOR TIMETABLING USING PHEROMONE AND HYBRID HEURISTICS BASED COOPERATING AGENTS

ABSTRACT

The present invention provides a timetabling system based on an improved ant colony optimization using pheromone and hybrid heuristics based cooperating agents. The timetabling system can provide an optimal timetable solution for a timetable problem that consists of a plurality of activities, each activity being scheduled to a start time within a planning period and being allocated all required resources from a plurality of sets of resources. In one aspect of the present invention, the timetabling system comprises an electronic device having a memory capacity that contains a storage medium, and a timetabling module being implemented in the electronic device. The present invention also provides a timetabling method based on an improved ant colony optimization by using pheromone and hybrid heuristics based cooperating agents to obtain an optimal timetable solution for a timetable problem that consists of a plurality of activities, each activity being scheduled into a start time within a planning period and being allocated all required resources from a plurality of sets of resources.

FIG. 1