An Investigation of Generality in two-layer Multi-agent Framework towards different domains

ABSTRACT

This paper proposes a two-layer multi-agent communication in two different environments. The communications in both layers of the framework are studied in order to determine the relevancy of agents to manage themselves towards different constraints across several domains. In this context, the generality of the multi-agent framework is measure by how well the agents improve the quality of solution compared with existing meta-heuristics. The two domains considered are university course timetabling and examination timetabling problems in Universiti Malaysia Sabah. The results are then compared with meta-heuristics introduced in previous studies using the same domains.