

Documents

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Scheduling with divide and conquer genetics – A model and implementation

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Abstract

- The Final Exams Scheduling Problem (FESP) that has multiple constraints and objectives relating to student and professor conflicts as well as availability of timeslots is a known NP-Hard problem. This has been addressed using tweaked computational algorithms that are based on the Genetic approach. The approach was implemented using C# with an Oracle database of the scheduled student classes for one semester in a small size university with 16000 student-section instances that were aggregated to 486 unique section offerings requiring a non-conflicting schedule. Tests showed positive results that were improved with the added heuristics to the standard Genetic Approach. CSREA Press ©.

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