

PREDICTION RULES IN E-LEARNING SYSTEMS USING GENETIC PROGRAMMING

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Abstract.

This paper describes the use of Data Mining Techniques to improve teaching–learning processes in the linear programming course offered at the Engineering Faculty at Mumbai University, India. The proposed approach seeks to model the student’s interaction with the study material using prediction rules whose interpretation will allow to detect the weaknesses of the educational process and evaluate the quality of the study material. The proposed rule discovery method is the Evolutionary Algorithms and particularly the Grammar-Based Genetic Programming (GB-GP), which is compared to association rules and decision tree construction for discovering prediction rules.

Keywords

Data mining techniques, E-learning, Evolutionary algorithms, Grammar-based genetic programming (GB-GP)