Abstract

Data Mining is the efficient knowledge discovery form database. It is also form of knowledge discovery essential for solving problem in specific domain like health care, business and other field. The proposed system is based on population based on heuristic search technique, which can used to solve combinatorial optimization problem. Our research focus on studying the hybrid algorithm that result in performance and enhancement in classification rule discovery task. In standard Particle Swarm Optimization (PSO) the non oscillatory route can quickly cause a particle to stagnate and also it may prematurely converge on suboptimal solution that is not even guaranteed to local optimal solution. In this paper we have present novel hybrid algorithm, PSO with Dynamic Inertia Weight and Genetic Algorithm (GA) approach for classification rule. The selection of inertia weight was very important to ensure the convergent
behavior of particle In this hybrid algorithm approach incorporates a dynamic inertia weight in order to help the algorithm to find global and overcome the problem convergence to local optima, essentially GA can perform a global search over the entire search space with faster convergence speed. Thus the hybrid algorithm is easily implemented because of use of simple classifier it has, its computational complexity is low, are the special characteristics for the use of this hybrid algorithm.

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A Hybrid PSO with Dynamic Inertia Weight and GA Approach for Discovering Classification Rule in Data Mining


Index Terms

Computer Science

Data Mining

Keywords

Genitic Algorithm  Particle Swarm Optimization  Classification