

Intelligent Frequent Pattern Analysis in Web Mining

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Abstract – Web usage mining aims to discover interesting user access patterns from web logs. Web usage mining has become very critical for effective web site management, creating adaptive web sites, business and support services, personalization and so on. In this research, an efficient approach for frequent pattern mining using web logs for web usage mining is proposed and this approach is called as intelligent frequent pattern analysis. In this approach, the proposed technique is applied to mine association rules from web logs using normal Apriori algorithm, but with few adaptations for improving the interestingness of the rules produced and for applicability for web usage mining. Before mine the association rules, we are going to classify data with fuzzy clustering which is optimized through genetic algorithm. Association mining often produces large collections of association rules that are difficult to understand and put into action. In this research effective and intelligent pruning techniques have proposed that are characterized by the natural web link structures. Experiment results gives the interestingness measures can successfully be used to sort the discovered association rules after the pruning method was apply. Most of the rules that are rank highly according to the interestingness measures prove to be truly valuable to a web site administrator.

Keywords – Web usage mining, Apriori algorithm, Fuzzy Clustering, Association mining.