World Academy of Science, Engineering and Technology
International Journal of Computer and Information Engineering
Vol:10, No:04, 2016

Efficient Recommendation System for Frequent and High Utility Itemsets over Incremental Datasets

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Abstract : Mining frequent and high utility item sets have gained much significance in the recent years. When the data arrives sporadically, incremental and interactive rule mining and utility mining approaches can be adopted to handle user's dynamic environmental needs and avoid redundancies, using previous data structures, and mining results. The dependence on recommendation systems has exponentially risen since the advent of search engines. This paper proposes a model for building a recommendation system that suggests frequent and high utility item sets over dynamic datasets for a cluster based location prediction strategy to predict user's trajectories using the Efficient Incremental Rule Mining (EIRM) algorithm and the Fast Update Utility Pattern Tree (FUUP) algorithm. Through comprehensive evaluations by experiments, this scheme has shown to deliver excellent performance.

Keywords : data sets, recommendation system, utility item sets, frequent item sets mining
Conference Title : ICCSEA 2016 : International Conference on Computer Science, Engineering and Applications
Conference Location : Boston, United States
Conference Dates : April 25-26, 2016