Association rule mining is a well-researched area where many algorithms have been proposed to improve the speed of mining. In this paper, we propose an innovative algorithm called *Rapid Association Rule Mining* (RARM) to once again break this speed barrier. It uses a versatile tree structure known as the *Support-Ordered Trie Itemset* (SOTrieIT) structure to hold pre-processed transactional data. This allows RARM to generate large 1-itemsets and 2-itemsets quickly without scanning the database and without candidate 2-itemset generation. It achieves significant speed-ups because the main bottleneck in association rule mining using the Apriori property is the generation of candidate 2-itemsets. RARM has been compared with the classical mining algorithm Apriori and it is found that it outperforms Apriori by up to two orders of magnitude (100 times), much more than what recent mining algorithms are able to achieve.

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