

## The Apriori Algorithm – a Tutorial

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Association rules are "if-then rules" with two measures which quantify the support and confidence of the rule for a given data set. Having their origin in market basked analysis, association rules are now one of the most popular tools in data mining. This popularity is to a large part due to the availability of efficient algorithms. The first and arguably most influential algorithm for efficient association rule discovery is Apriori.

In the following we will review basic concepts of association rule discovery including support, confidence, the apriori property, constraints and parallel algorithms. The core consists of a review of the most important algorithms for association rule discovery. Some familiarity with concepts like predicates, probability, expectation and random variables is assumed.