## SEARCH PATTERN SPECIALISATION CONCENTRATION STUDY PROGRAM IN INFORMATICS ENGINEERING UNIVERSITY MUHAMMADIYAH JEMBER APRIORI ALGORITHM USING AND ASSOCIATION RULE

<sup>1</sup>Istiana Fii Sabilillah (12 10651066), <sup>2</sup>Lutfi Ali Muharrom, S.Si, M.Si Muhammadiyah University of Jember, Department of Informatics Engineering, Engineering Faculty

Jl. Karimata 49. Phone (0331) 336728 Jember Email: <u>istianafs5@gmail.com</u>

## **Abstract**

Association rule mining is a data mining techniques to find the appropriate associations or relationships between data from large amounts of data. A large amount of data to be processed, can be found rule - his rule algorithms using a priori by two main processes namely the search for frequent itemsets based minimum support (join and prune step step) and the establishment of rule based on minimum confidence.

In this final project, will make the system search for patterns in association concentration specialization courses on academic data Alumni Association Rule and using Apriori algorithm which is where this method can find a pattern association. At this time, Kaprodi Information Engineering University of Muhammadiyah Jember still have not found an association patterns to help determine areas of interest.

From the observation during the process of testing and evaluation, the rule that produced with minimum support and confidence 0.1 0.1 to 0.9 to produce the best rule as much as 2 rule where the consequent is RPL and SBC. If the 0.01 minimum support and confidence of 0.1 to 0.9 to produce the best rule for 23 rule where the consequent is RPL, SBC and KBJ. It can be concluded that more variations minsup and then more and more confidence with consequent best rule is interest.

Keywords: association rule mining, Apriori Algorithm.