

## ***Abstract***

*Currently mobile Phone has become one of the essential needs of the community and one of the very future count on the mobile phone is the short message service (SMS). SMS while useful to convey a clear concise message and cost-effective use of, any data presented in the form of text so that the data can be saved and used for other purposes. But in the same case, a decline in the price of SMS, this triggers increased unsolicited commercial advertisements (Spam). Spam is very menguntungkan for the sender but annoying for the recipient when the message because the message received is forced to output a very large, very significant increase in spam SMS, in 2013 in the Asia region SMS spam increased by 30%. In this research is done Spam detection analysis and implementation to perform spam filtering on SMS with Algorithms Artificial Immune System (AIS), a grouping algorithm that uses the idea of the human immune system with supplemental priori algorithm to generate frequent itemset. as the result Artificial Immune System algorithm can increase the work for sms filtering system 5% and have an accuracy above 95% , because like immune system in human body it can make new antibodies that can solve a problem about SMS spam dan a new combination of dataset from frequent itemset increase the result of the system*

***Keywords:*** SMS, spam, Artificial Immune System, a priori