

## **ABSTRACT**

SMS is a medium of communication that often used by the public, in the presence of SMS someone can send news. In SMS network, messages sent can be read by people who are not responsible, because of it needs to process the encryption and decryption of SMS

In this final project created an implementation that combines two symmetric and asymmetric algorithms for encryption and decryption SMS text so that the results obtained are more secure. The text will encrypted with a symmetric algorithm RC6, then the results of algorithms RC6 will processed using asymmetric RSA.

RC6 and RSA algorithms implemented on Android smart phone that has a good performance, seen from Avalanche Effect that given values ranged from 0.43-0.52. Comparison of the encryption and decryption of messages, where a growing number of users enter then the message encryption and decryption time is getting old.

**Keywords** : Android, decryption, encryption, RC6, RSA