# Abstract

Confidentiality of data is much needed in data communication. To ensure the security and confidentiality of the data required a technique that can encode data. This technique is usually called cryptography. There are many cryptography algorithms such as One Time Pad, RC4, RSA, and others that are considered fully capable of maintaining security and confidentiality of data. Therefore the cryptographer attempt to create a complex algorithm to ensure the better safety.

Algorithm WAKE (Word Auto Key Encryption) is one of the algorithm that is used to encode data. The author implementate and analyzes the algorithm. The author analyzed the complexity, the file size, security level, and the comparison of the execution time with the other cryptography algorithm.

WAKE security algorithm lies in the number of cycles specified by the user. If there are plentiful cycles, the generated key more random, and the data more secure.

**Keywords**: crypthography, WAKE, security of data