

## **ABSTRACT**

Currently, the development of technology is progressing very fast, as well as information on the media technologies such as Push to Talk. But the level of information security of voice data that is sent is still not assured. Confidential information security should be increased. Because it is required by cryptography method to maintain data confidentiality of such information.

This final research project will also design and make a Push to talk application. In this study the authors will examine the security of voice data using Salsa20 as a stream cipher Cryptography algorithms.

This study aims to analyze the performance of the Stream Cipher Salsa20 Algorithm by parameters: encryption and decryption processing time, the avalanche effect. From the result of avalanche effect testing, we can see that salsa20 has a good performance on data security.

**Keyword** : Cryptography, Salsa20, Push to Talk.