## **Abstract**

It is human nature to be able to deliver message for the intended person only. This is crucial to prevent another people to open and read the message for privacy reason. Hence, security is an important part of message delivery process.

In the very rapidly-developing telecommunication technology, message delivery process also requires message encryption. Recently, telecommunication technology has shifted toward mobile telecommunication that enables message delivery from different places at any time. Pocket PC is an example of the commonly used mobile application that facilitates various functions to help the user with their activities including for communications.

Location-based encryption or geo-lock encryption is an encryption method that describes information, in this case data in form of file text also called plaintext and can only be decrypted at certain location. To describe the data, it requires a GPS receiver available in the mobile application.

In this final assignment, we analyze the geo-lock encryption system and implement it in a form of software that capable to describe the decrypted-data at a certain location with the assistance of the GPS receiver in the mobile application.

Keyword: Security , Encryption location based , Geo-lock encryption, mobile application, Encryption, Decryption, GPS.