Abstract

Recently, the misused of copyright is frequently occured as the impact of information technology development. Therefore, methods for securing the copyright of product is necessary. For overcoming the above problem, the identity of data digital is an important alternative solution. There were many methods to prove the originality of product. One of the method used to implement the identity of digital data is watermarking.

This final project will discuss the topic about text watermarking. Text watermarking can be implemented using natural language watermarking, which is using using linguistic or grammatical. Several methods have been proposed for implementing natural language based watermarking such as syntactic alteration and morphological division and insertion. Both methods have weakness in coverage (capacity of data embeded) where their coverage is less than 10%.

To overcome the related problem, natural language watermarking technique using semantic substitution is proposed. In this proposed method, the watermark is embedded by changing the word in the text and replace it with it's synonym. This semantic substitution method can increase the coverage up to 23 %.

Keyword : internet, watermarking, natural language watermarking, semantic substitution, syntactic alteration, morphological division and insertion.