

## Abstract

*Keyword is the most important thing in a document. Keyword is a representation of the entire contents of a document. Keyword contains a collection of words/phrases that have a meaning that represents the contents of the document as a whole. In the keyword search and the determination needed special techniques, namely keyword extraction. Keyword extraction is a field of science that is in text extraction of keywords in a document in order to get the keywords that describe the content of a document.*

*This final year project aims to find keywords in a document by using Support Vector Machine (SVM) with Polynomial Kernel. Classification is done on a word/phrase is the word/phrase is a keyword or not. There are four stages in the process of keyword extraction, which preprocessing, feature extraction, learning, and extraction. Attributes used in the feature extraction process is TFIDF and the presence of the word in the title of abstract. The experimental results show that the combination of the parameters  $C$ ,  $d$ , and  $\gamma$  do not significantly affect the classification results. Average generated in the process of keyword extraction with SVM ranging 40% to 50%.*

**Keywords:** *Keywords, Classification, Keyword Extraction, Text Mining, Support Vector Machine, PWP, TFIDF*