

## Abstract

*With growing information technology has been widely developed various content-based searching method, i.e. Content-Based image retrieval (CBIR) systems, which is a mechanism for query image searches, image searches due based on the text is not effective.*

*In this final project, which was built image retrieval method was developed by sorted gray level histogram polynomial curve. Whereby to obtain the value of the image features used polynomial equation of the sorted histogram. Degree of polynomial equation that are used from degree 1 to degree 10, and selected degree which has the smallest error as the image feature. Features generated image of  $n + 1$  coefficients of the polynomial degree  $n$  with the smallest error. The calculation of similarity between the query image with images in the database using Euclidean distance.*

*The results of this final project is a CBIR system that can be used in image search process and can analyze how accurate is if the CBIR system using sorted gray level histogram polynomial curve as image features extraction.*

**Keywords:** *Content Based Image Retrieval, sorted histogram, polynomial curves*