

## ***Abstract***

*Due to the availability of images in a large scale nowadays, a system to organize images according to certain categories is needed to help user to find a required image. Image search using text is no longer effective as captioning the image by each person is too subjective and takes a long time. Image search with image as a query using image features is also no longer effective as it need the image as a query and the results are still not match. Automatic Image Annotation is a system that can overcome the lack in image search using text and image retrieval using query images, by giving an automatic annotation to the image using image features. In this research, Automatic Image Annotation system will be built using Speeded Up Robust Feature (SURF) as feature extraction method and Support Vector Machine using Bag-of-Visual-Words as classification method. From the experiments, the highest F1 Score is 0,9001 obtained with 0 threshold, 500 clusters, and one-against-all SVM.*

***Keywords*** : Automatic Image Annotation, SURF, SVM, visual words.