The effect of features combination on coloscopy images of cervical cancer using the support vector machine method

Title	The effect of features combination on coloscopy images of cervical cancer using the support vector machine method
Author Order	1 of 5
Accreditation	1
Abstract	Cervical cancer is cancer that grows in cells in the cervix. This cancer generally develops slowly and only shows symptoms when it has entered an advanced stage. Therefore, it is crucial to detect cervical cancer early before serious complications arise. One way to detect cervical cancer early is to use colposcopy, which is to look closely at the condition of the cervix to find changes in cells in the cervix that have the potential to become cancer. However, this method requires the expertise of an obstetrician. This research proposes the use of image processing techniques to create automatic early detection of cervical cancer based on coloscopy images. In this paper, we will discuss image selection using an approach in the form of comparing the weights of feature vectors and then using a data distribution threshold, features that are not too influential can be eliminated. Image classification uses the Support Vector Machine (SVM) method, which makes it possible to distinguish normal images from abnormal images. Classification with feature selection and merging results can improve the consistency of SVM model performance evenly across all four SVM kernels.
Publisher Name	Institute of Advanced Engineering and Science
Publish Date	2024-09-01
Publish Year	2024
Doi	DOI: 10.11591/ijai.v13.i3.pp2614-2622
Citation	
Source	IAES International Journal of Artificial Intelligence (IJ-AI)
Source Issue	Vol 13, No 3: September 2024
Source Page	2614-2622
Url	https://ijai.iaescore.com/index.php/IJAI/article/view/24681/14068
Author	Dr RETNO SUPRIYANTI, S.T, M.T