LITERATURE SURVEY

TITLE: colorectal cancer detection in MRI images using image processing techniques

AUTHOR: T.manivannan, M.jaya Kandan

YEAR: February 2018

JOURNAL NAME : International journal of engineering science and research technology

METHODOLOGY USED : the implementation of this clustering, segmentation and pre-processing is done with MATLAB 2015. by using this proposed methodology, the cancer is detected in its earlier stages.

OBSERVATION : The proposed model combines CNN and LSTM and exploits the advantages of both CNN and RNN. Leave-one-out cross-validation indicates that the model performance is improved significantly.

TITLE : Two stage classification with CNN for colorectal cancer detection

AUTHOR : Pallavi Sharma, Kangana bora, Kunio Kasugai and Sunil Kumar balabantaray

YEAR : 2019

JOURNAL NAME : oncology

METHODOLOGY USED : The CNN models namely VGG16,VGG19,inception V3,Xception,GoogleNet,resnet50,resnet 100,densenet,NASnet mobile, mobilenetV2,inception resNet V2 and fine-tuned version of each model is evaluated.

OBSERVATION : The ultimate goal was designing a system of systems that fulfils users request by actively interacting with them, while other system components were gathering and sharing the data.

TITLE : Automatic classification of non-informative frames in colonoscopy videos

AUTHOR : Ballesteros ,Trujillo and C.Mazo

YEAR : 2020

JOURNAL NAME : proc. Latin-American conference networked and electronic media

METHODOLOGY USED : A random forest classifier was used for classification. An enhanced edge detection-based method was proposed.

OBSERVATION : However, very bright regions due to specular reflections can produce false edges. Therefore , the proposed method includes bright region segmentation to identify and remove false edges.

TITLE : Non-informative frame classification in colonoscopy videos using CNN

AUTHOR : A.B.M.R.Islam , A.Alammari, W.Tavanapong,J.wong and P.C.de groen

YEAR : 2019

JOURNAL NAME : proc. Int'l conference on biomedical imaging, signal processing

METHODOLOGY USED : A CNN model was used with random trained dataset.

OBSERVATION : Inadequate or improper bowel preparation is characterized by remaining debris and cleansing agent which are causes of non-informative frames.

TITLE : Detection of frame informativeness in endo-scopic videos using image quality and recurrent neural networks.

AUTHOR : G.W. boers, J.van der putten, J.de groof, M.struyvenberg, K.fockens, W.curvers, E.schoon, F.van der sommen, J.bergman and P.H.N.de

YEAR : 2020

METHODOLOGY USED : Gradient-weighted class activation map interpretation was used to localize the informativeness within a frame. The resnet 18 extracted features were input to three separate classifiers, namely, the fully connected network,LSTM and GRU.

OBSERVATION : Although the required computation time was high , experiments based on around 17,000 frames showed an average area-under-the-curve of 93.9% and an average F1 score of 77.5%