
Abstract

Cancer is one of the most lethal disease in the world. Therefore early treatment of cancerous patient is proofed effective to decrease the lethal rate of this disease. For example is cervical cancer, the precancerous step of cervical cancer is able to be detected by looking at the cancerous transformation zone on the cervix .Furthermore there are some different type of cervix regarding to it's transformation zone. Therefore skills and experience is needed to be able to precisely determine which type of cervix making detection of cervical cancer is less efficient. This study is creating a deep learning model based on Capsule Networks to classify colposcopy images as a solution to make cervical cancer detection and treatment more effective and efficient. With a result of 100% accuracy of the test set and 94.98% accuracy of the train set. This study exceed the result of other earlier experiments.

Keywords: Cervical Cancer, Cervical type classification, Deep Learning, Capsule Network.
