Abstract

Brain tumor is understood by the scientific community as the growth of abnormal cells in the brain, some of which can lead to cancer. A brain tumor occurs when abnormal cells form within the brain. There are two main types of tumors: malignant tumors and benign (non-cancerous) tumors. These can be further classified as primary tumors, which start within the brain, and secondary tumors, which most commonly have spread from tumors located outside the brain, known as brain metastasis tumors. All types of brain tumors may produce symptoms that vary depending on the size of the tumor and the part of the brain that is involved. The traditional method to detect is nuclear magnetic resonance (MRI). Having the MRI images, information about the uncontrolled growth of tissue in the brain is identified. In the existing system algorithms such as SVM, CNN have been used. The proposed work is divided into three stages. Pre-processing steps are applied using the techniques of image segmentation on the brain MRI images, then features are extracted using grey level co-occurrence matrix (GLCM) and finally classification performance using fuzzy c means (FCM) algorithm and Logistic Regression. The brain MRI image data set is obtained from the Kaggle repository.