

Brain Tumor Detection Using Machine Learning Algorithm

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Abstract: Brain is the regulatory unit in human body. It controls the functions such as memory, vision, hearing, knowledge, personality, problem solving, etc. The main reason for brain tumor is the abandoned progress of brain cells. Many health organizations have recognized brain tumor as the second foremost dispute that causes a large number of human deaths all around the world. Identification of brain tumor at a premature stage offers opportunity of effective medical treatment. Use of Magnetic Resonance Imaging images have been recognized as more detailed and more consistent images when compared to Computed Tomography images. There are various techniques to detect brain tumor or neoplasms. The most competent and effective algorithms are discussed in this paper after studying a number of appropriate research papers. Pre-processing brain images, segmenting them, feature extraction, clustering and detection of the tumor are the methodologies in most researches.

Keywords: Magnetic Resonance Imaging (MRI), Convolutional Neural Network (CNN), Brain Tumor Classification (BTC), Deep Learning (DL), Machine Learning (ML), Gray-Level Co-occurrence Matrix (GCM)

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