عنوان فارسی مقاله:
تشخیص تومور مغز انسان به کمک کامپیوتر از طریق MRI
یک بررسی و یک الگوریتم جدید

عنوان انگلیسی مقاله:
Computer-aided diagnosis of human brain tumor through MRI:
A survey and a new algorithm

توجه!
این فایل تنها قسمتی از ترجمه میباشد. برای تهیه مقاله ترجمه شده کامل
با فرمت ورد (قابل ویرایش) همراه با نسخه انگلیسی مقاله، اینجا کلیک نمایید.
6. Conclusion and future work

With the advance of computational intelligence and machine learning techniques, computer-aided detection attracts more attention for brain tumor detection. It has become one of the major research subjects in medical imaging and diagnostic radiology. In this study, we reviewed current studies of the different segmentation, feature extraction and classification algorithms. In particular, this paper reviews recent papers which are between 2006 and 2012. In light of this, we proposed a hybrid technique for processing of MRI brain images. The proposed technique first applies feedback pulse-coupled neural network as a front-end processor for image segmentation and detecting the region of interest, and then employs the discrete wavelet transform to extract features from MRI images. Moreover the principal component analysis is performed to reduce the dimensionality of the wavelet coefficients which results in a more efficient and accurate classifier. The reduced features are sent to back-propagation neural network to classify inputs into normal or abnormal based on feature selection parameters.