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## Knowledge based system for the diagnosis of MRI images of all parts of the human body

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In medical diagnosis, Magnetic Resonance Image (MRI) plays a momentous role. The appropriate name for this study is nuclear magnetic resonance image (NMRI) changed to simply MRI due to the feeling of too negative of the word "nuclear". MRI is based on the physical and chemical principles of nuclear magnetic resonance (NMR), a technique used to gain information about the nature of molecules. Retrieving a high quality MR Image for a medical diagnosis is critical, because it injures human more if we pass high level magnetic resonance sound to take the image. So de-noising of magnetic resonance (MR) images and interpreting it into human understandable form is a challenging issue. This research work presents an efficient Hybrid Abnormal part Detection Algorithm (HADA) to detect the abnormal parts in the magnetic resonance images of any part of a human body including brain, kidney, spinal card, etc. The proposed technique includes of five stages like Noise reduction, Smoothing, Feature extraction, Feature reduction and Classification. The proposed algorithm has been implemented and the Classification accuracy of 98.80% has been achieved. The system developed using the proposed algorithm will be good computer aided diagnosis and decision making system in healthcare.

### Biography

M. Hemalatha completed M.Sc., M.C.A., M. Phil., Ph.D. (Ph.D., Mother Teresa women's University, Kodaikanal). She is a Professor and Head, guiding Ph.D. Scholars in Department of Computer Science at Karpagam University, Coimbatore. Twelve years of experience in teaching and published more than hundred papers in International Journals and also presented more than eighty papers in various national and international conferences. Area of research is Data Mining, Software Engineering, Bioinformatics and Neural Network. She is a Reviewer in several National and International Journals. She also visited countries such as Singapore, Hong Kong and Israel.

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