

MEDICAL IMAGE SEGMENTATION USING SEQUENTIAL HYBRID TOPOLOGY PRESERVING MAP

M. C. JOBIN CHRIST^a AND R. M. S. PARVATHI^b

^a Assistant Professor / Department of Biomedical Engineering,
Adhiyamaan College of Engineering, Hosur, Tamilnadu, India

^b Principal, Sengunthar College of Engineering, Tiruchencode, Tamilnadu, India

Abstract

Every method is having its own merits as well as demerits depend upon their applications. So in order to strengthen the methods, hybridization integrates the technologies by suppressing their weakness. We may integrate fuzzy logic with neural networks, fuzzy logic with genetic algorithms, genetic algorithm with neural networks and so. In medical image segmentation, instead of applying a single technology if we are applying multiple technologies together means it will produce efficient results. In this paper we present hybridization between K-Means (KM) algorithm and Hybrid Topology Preserving Map (HTPM). Result of the proposed method is compared with HTPM.

Keywords : Brain tumor, MRI, Segmentation, KM, HTPM.