

Abstract

This research presents a brain model based on Zeeman Medium Scale Theory. The model utilizes and idealizes the brain physiology of both of the Cerebral Cortex and Cerebrospinal Fluid. These

Two biological organizations provide us with both the connection and field effect structures. Therefore, the model is neither a traditional brain model nor a neural network model. It is actually both of them. The functioning of the model has been postulated on the basis of selective attention of Fukushima and minimum energy of Hopfield.

The behaviouristic aspects of the model have been interpreted as outcomes of the modulized structure. Moreover, Pattern Recognition characteristics have been implemented and tested and proved to be in accordance with human behavior. The main conclusion drawn from these behaviouristic interpretations is that the memory and processing within the model are in fact algorithms or procedures stored as functional attributes and not data stored in neurons.