Implementation of Decision Tree Technique in the Diagnosis of Psychiatric Disorder

Abstract

In this work, the Electro-encephalogram and Magnetic Resonance Imaging (MRI) features along with physical, cognitive and psychological features combined together to diagnose the psychiatric disorder. The disorders are taken for diagnoses are Hyperactivity Disorder (HD), Memory Disorder (MD), Anxiety Disorder (AD), Obsession Disorder (OD) and Alzheimer (AZ). The diagnosis procedure of the disorder depends upon the different types of features. In this research paper we are considering 20 factors divided into five categories and with the help of decision tree based C5.0 method to know the important factors in the diagnosis of disorder. The design of decision tree for C5.0 method in consideration to Clementine tool is also matched with the manual calculation. The decision tree model supports doctor's to get easier way to interpret and diagnoses disorder on the basis of important factors.

References


Index Terms

Computer Science
Applied Sciences
Keywords

Artificial Intelligence, Decision Tree, Medical Computing, Psychiatric Disorder, Computational Intelligence.