

LITERATURE SURVEY

CHAPTER 2

LITERATURE SURVEY

2.1 INTRODUCTION:

This chapter discusses the results of a literature review of existing models. The working principle, advantages, and limits of the existing paradigms have been discussed.

2.2 LITERATURE SURVEY

2.2.1. Detection of Autism Spectrum Disorder using Machine Learning

Authors: R.Bhuvaneswari, Pranusha S Bhavan

OBJECTIVE

A person's behaviours can be used to diagnose autism disorder. They are always in need of support either from their parents or friends to guide them.

ADVANTAGES

Logistic Regression, Naïve Bayes, Support Vector Machine, k-nearest neighbours and random forest classifiers are used.

DISADVANTAGES

This method is time consuming and ineffective for early detection of autism. There is a need for time efficient and low cost ASD screening to help individuals to decide whether they should undergo a clinical diagnosis and seek treatment.

2.2.2 A new computational intelligence approach to detect autistic features for autism screening

Authors: Thabtah, Fadi, Firuz Kamalov, and Khairan Rajab

OBJECTIVE

In this paper general practitioners and family physicians are the first of contact for patients or family members concerned with ASD traits observed in themselves or their family member. Unfortunately, some families and adult

patients are unaware of ASD traits that may be exhibited and as a result do not seek out necessary diagnostic services or contact their gp.

2.2.3 A machine learning based approach to classify Autism with optimum behaviour sets

Authors: Vaishali, R., and R. Sasikala

OBJECTIVE

Machine Learning based behavioural analytics emphasis the need to develop accurate prediction models for detecting the risk of autism faster than the traditional diagnostic methods. Quality of prediction rely on the accuracy of the supplied dataset and the machine learning model. To improve accuracy of prediction, dimensionality reduction with feature selection is applied to eliminate noisy features from a dataset.

2.2.4 Rapid quantitative assessment of autistic social impairment by classroom teachers

Authors: Constantino, John N., Patricia D. Lavesser, Y. I. Zhang

OBJECTIVE

In this paper teachers routinely observe children in the naturalistic social contexts of their classrooms and provide extremely important input in the evaluation of numerous psychiatric syndromes. Their precision in ascertaining and quantifying autistic symptomatology has not previously been established. In this study, we compared teachers' ratings of autistic symptomatology with those derived from parents, expert clinicians, and trained raters.

ADVANTAGES

Use of quantitative ratings from both informants resulted in extremely high sensitivity and specificity for clinical and research diagnoses of PDDs

Here the teacher is regular entity who interacts with the students so they may know the the wards regular behaviour. So it will be easy to analysis them.

DISADVANTAGES

In this paper the teacher is regular to students because of the relationship . So this process will take huge timethe paper values may have more zeal values is the have consulted psychiatrist and analyst.