

Title:Autism Screening Disorder : Early Prediction(Conference Paper)

Author: Rashme, T.Y., Islam, L., Prova, A.A., Jahan, S.

A Uttara University, Dept. of Computer Science and Engineering, Dhaka, Bangladesh

Jagannath University, Dept. of Computer Science and Engineering, Dhaka, Bangladesh

central Women's University, Dept. of Computer Science and Engineering, Dhaka, Bangladesh

[View additional affiliations](#)

Abstract

Autism Spectrum Disorder (ASD), which is a developmental disability due to neuro-development disorder. This disorder is a brain growth disorder that affects how an individual perceives and interacts with others, resulting in social contact and communication difficulties. Though this disorder is the result of genetic or in nature but earlier detection allows earlier intervention, which is generally more effective. Based on ASD history research, This ASD problem begins with childhood and as time goes this disorder progresses into adolescence and adulthood. Thus, in this paper, a model has been proposed for the early prediction and analysis of ASD problems in children, adolescents, and adults. Principal Component Analysis (PCA) is used for the feature reduction method and then various machine learning algorithms have been applied to three ASD datasets relating to Children, adolescents, and adults. 10-fold cross-validation is used to evaluate the performance of applied machine learning algorithms. The result produces from our proposed model shows that Logistic Regression shows outperform comparing to all other benchmark machine learning algorithms in terms of accuracy, precision, recall, and F1-score during the prediction of ASD cases. © 2021 IEEE.

Author keywords

ASDLOGISTIC REGRESSIONMACHINE LEARNINGPCA

Indexed keywords

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