ABSTRACT

In recent years, machine learning has had a huge impact on a number of technology fields. As technology expands, machine learning provides a magnificent opportunity in healthcare to help medical professionals care for patients and manage clinical data. It improves the accuracy of diagnoses, personalizes healthcare and finds new solutions to decades-old problems. Hospitals and healthcare companies have begun to recognize the ability of machine learning to improve decision-making and reduce danger in the medical field, leading to several new and exciting career opportunities. One of the acute neurodevelopmental disorders in the world today is autism spectrum disorder (ASD). It is a lifelong disorder that affects an individual's behavior and communication skills. Its symptoms usually appear during the developmental stages, i.e. within the first two years after birth, and it affects about 1% of the population worldwide. Autism spectrum disorder is mainly caused by genetics or environmental factors; however, its conditions can be improved by detection and treatment at earlier stages. As with the rise of machine learning techniques, the world is rapidly expanding the use of these techniques such as Support Vector Machines (SVM), Random Forest Classifier (RFC), Naïve Bayes (NB), Logistic Regression (LR) and KNN to detect ASD.