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(57) Abstract :
People all over the world have experienced significant psychological impacts as a result of the effects of stress, anxiety, and the fast-paced lives that are prevalent in today's society. The digitization of the vast amounts of data that are collected by the worldwide technological advancement in the healthcare industry makes it possible to create a map of the various forms of human biology that is more precise than the old methods of measurement. In the field of healthcare, machine learning (ML) has been recognized as an effective method for interpreting the vast amounts of data that are available. For the purpose of predicting the likelihood of mental diseases and, consequently, executing prospective treatment outcomes, machine learning techniques are being applied in the field of mental health. A variety of machine learning techniques that are utilized in the detection and diagnosis of depression are enumerated in this review paper. Classification, deep learning, and ensemble are the three categories that are used to classify the machine learning-based depression detection systems. The purpose of this paper is to offer a generic model for the diagnosis of depression. This model includes data extraction, pre-processing, training neural network classifiers, detection classification, and performance evaluation. In addition, it provides an overview that identifies the objectives and limits of many research papers that have been presented in the field of depression identification. In addition to that, it highlighted potential avenues for research in the field of depression diagnosis in the future.

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