ABSTRACT

The study aimed to address the challenges of obtaining high accuracy in detecting diabetes while keeping the complexity of the machine-learning model low. The study also proposed a solution to the challenge i.e., is to utilize five feature selection algorithms and six classification algorithms to detect Type 2 diabetes. Support Vector Machine with features obtained from Forward Stagewise Selection achieved the highest accuracy of 91.5582% in 10-fold cross-validation This study contributes to the development of efficient tools for detection of diabetes, focusing on simplicity for broader accessibility**.**