

Online Exam Portal

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***Abstract:** Today's pandemic situation has transformed the way of educating a student. Education is undertaken remotely through online platforms. In addition to the way the online course contents and online teaching, it has also changed the way of assessments. In online education, monitoring the attendance of the students is very important as the presence of students is part of a good assessment for teaching and learning. Educational institutions have adopted online examination portals for the assessments of the students. These portals make use of face recognition techniques to monitor the activities of the students and identify the malpractice done by them. This is done by capturing the students' activities through a web camera and analyzing their gestures and postures. Image processing algorithms are widely used in the literature to perform face recognition. Despite the progress made to improve the performance of face detection systems, there are issues such as variations in human facial appearance like varying lighting condition, noise in face images, scale, pose etc. that blocks the progress to reach human level accuracy. The aim of this study is to increase the accuracy of the existing face recognition systems by making use of SVM and Eigenface algorithms. In this project, an approach similar to Eigenface is used for extracting facial features through facial vectors and the datasets are trained using Support Vector Machine (SVM) algorithm to perform face classification and detection. This ensures that the face recognition can be faster and be used for online exam monitoring.*

Keywords: Face Detection, Face Recognition, Online Test Portal, Image Processing, Support Vector Machine

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