

ABSTRACT

APPLICATION OF YOLOv8 ALGORITHM FOR FACE DETECTION IN DARING ASSESSMENT IMPLEMENTATION

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Assessment activities are a series of assessments carried out with the aim of measuring the level of understanding, knowledge, and achievement of an individual. The implementation of assessments can be carried out in two ways, both offline and online and still requires supervision to ensure there is no fraud while the process is ongoing. The supervision method in both assessments cannot be equated, especially in the implementation of online assessments because it has its own challenges in finding indications of violations even though all participants are displayed in the same media. Based on these challenges, a system is needed that can help carry out supervision simultaneously in the assessment implementation process. A system that can be applied to overcome these challenges, namely by using a face detection system. The face detection system that will be made in this research is a face detection system that applies the YOLOv8 algorithm because it has good accuracy in detecting objects and has been recognized by Microsoft Coco. The working principle of this detection system has the ability to detect the presence of participants during the assessment session, more than one individual other than assessment participants and changes in the direction of the participant's gaze, both to the left and to the right which is indicated as cheating in the online assessment. The face detection system created by researchers is able to detect all three indications of cheating and has an accuracy rate of 96%.

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