

STUDENT PRESENCE OF THE NEW NORMAL ERA BASED ON REAL-TIME MASK-WEARING FACE RECOGNITION WITH DEEP LEARNING

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ABSTRACT

The presence of students in attending lectures has a positive correlation with the knowledge gained. The relationship between attendance and the knowledge gained causes the presence of attendance is one of the requirements that must be met by students in face-to-face lectures. To support this, several universities apply minimum attendance regulations so that attendance registration administration is required.

The recording of lecture attendance was initially done in several ways by giving initials on the attendance sheet. In new normal conditions after the Covid-19 pandemic, lectures will be carried out according to predetermined health protocols such as wearing masks, maintaining distance between students and avoiding touching. Attendance manually using a signed attendance sheet makes students hold the same object in turn, thus making health protocols inoperable. These problems can be overcome with an online presence system. However, the current online presence is still not efficient because the recording process is still done manually by the lecturer calling the student's name. This method is not efficient because it is done repeatedly at each meeting, causing reduced time used for lectures.

Researchers are trying to develop various methods to overcome this such as by using fingerprint presence, Internet of Things devices, cards with RFID technology, QR Code and smartphones. It's just that the technology used requires a lot of equipment and costs a lot. One method to be able to determine attendance is facial recognition technology. Facial recognition is able to identify many people at once without having to make direct contact. Although it has many advantages, this technology still needs to be tested for accuracy, especially if it is used for attendance systems. Therefore, this study aims to develop a presence system with real-time mask-wearing face recognition and then test the accuracy of the system.

Kata Kunci: *presence, mask-wearing, face recognition*