Abstract

In Indonesia, the e-ticketing system has been widely used for entertainment events, one of which is a music festival. The mechanism for purchasing tickets using the e-ticketing system for an entertainment is generally almost the same, by going through the following 3 stages: Registration, exchange, and verification. However, at the stage of the second ticket purchase mechanism, namely exchanging e-tickets for wristbands, it still has weaknesses in the authentication aspect. So that tickets can be duplicated or falsified, in addition to tickets that have been purchased can be resold, this is one of the causes of the emergence of ticket scalpers (illegal ticket sellers). This system uses face recognition biometric authentication for the e-ticketing system mechanism which is expected to improve this weakness. The e-ticketing system using face recognition is carried out in real time during authentication with a dataset when registering. The system was tested with 13 people's faces registered in the dataset. From the results of the tests carried out, all facial data in the dataset can be recognized by the system during real-time testing, with an accuracy of 97% at a confidence value of 0.4, bright lighting conditions and also a distance of ≤ 50cm.

Keywords: E-ticket, Face Recognition, Raspberry pi