

ABSTRACT

Face recognition is mainly used for security, especially face authentication process. This system prevents intruders from accessing unauthorized areas. After Covid-19 trend decreases, many people tend to use masks to prevent diseases. However, ordinary face recognition cannot recognize masked faces.

Now, face recognition systems have been evolving over the years; one of the implementations is masked face recognition technology. This face recognition system is implemented based on CNN algorithm. CNN algorithm can be used for masked face recognition, either from picture or video captured from a webcam. 6 Telkom University students' masked face samples are tested in this research.

This research is done in EvConn Telkom University laboratory and Haruman kost to get series of images. Next, images are processed to get a training model. This training model is used for face recognition. This system can detect and recognize previously trained faces' identities, with an average accuracy of around 83,33%.

Keywords: *Convolutional Neural Network, Mask, Python, Face Recognition*