

# Review

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Paper title **GAN-based Face Reconstruction for Masked-Face inception networks**

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Partially concealed faces by mask in situation like pandemics, or air pollution has exerted dramatic influences and reduce the performance of existing security and authentication systems due to the absence of large-scale training data and the presence of large intraclass variation between masked faces and full faces. This imposes the demand to tackle such authentication concerns using more robust and reliable facial recognition systems under different settings. To this end, we proposed a novel method for interaction-free mask removal from facial images. The hidden parts of the face are regenerated in the most realistic way by GAN-based image-to-image translation. Our proposed pipeline could be involved in various areas such as criminal face recognition, and secure authentication. Moreover, due to the lack of public datasets containing real masked face images, we create a high-quality paired dataset of real faces along with their simulated masked one by placing synthetic masks over the real face images for training.

Advantages:

they create a high-quality paired dataset of real faces along with their simulated masked one by placing synthetic masks over the real face images for training.

Disadvantages:

lack of dataset