

Face Blurring for Privacy Protection

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Abstract

Face blurring is a privacy protection technique used to obscure the identity of individuals in images or videos. It involves the use of algorithms or software that automatically detect and blur out facial features in an image or video frame. This technique is commonly used in situations where the individuals being filmed or photographed have not given their consent to be identified or where their identity could put them at risk. While face blurring is an effective tool for protecting privacy, it is not foolproof and should be used in conjunction with other privacy protection measures.

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Problem definition

The problem that face blurring for privacy protection aims to address is the potential harm caused by the unauthorized or unwanted publication of images or videos that reveal the identity of individuals. In many situations. Therefore, face blurring is a technique that seeks to mitigate these risks by obscuring the facial features of individuals in such images or videos. The problem definition of face blurring for privacy protection is to provide a means of safeguarding the privacy and safety of individuals in situations where their identity needs to be protected.

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Methodology

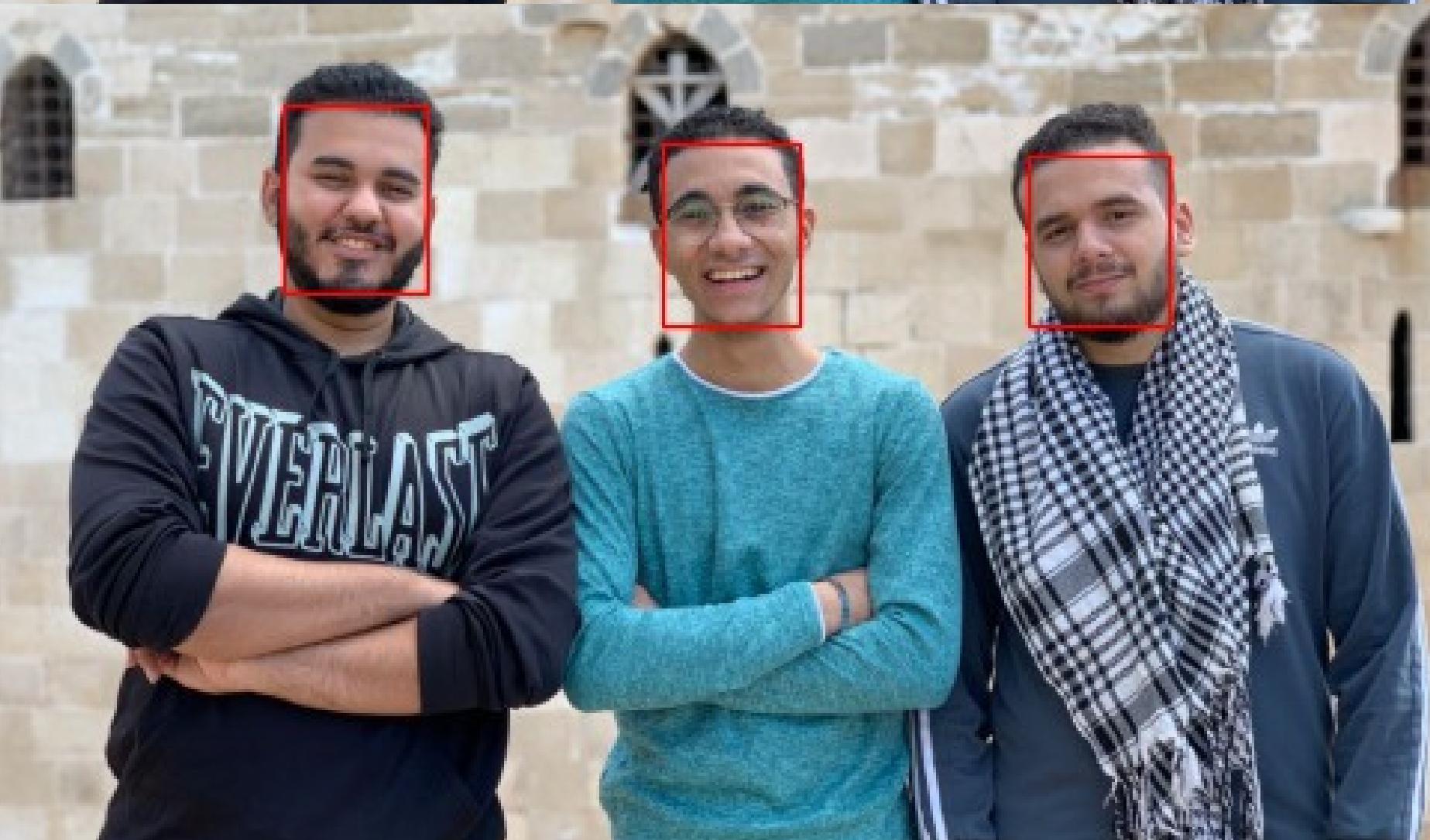
The methodology of face blurring can vary depending on the context and requirements of the application. For example, in live streaming or real-time monitoring, the process may need to be automated and integrated with the camera or software system. In other cases, such as news reporting, manual review of the blurring may be required to ensure that the identity of individuals is adequately protected. Additionally, the effectiveness of face blurring can be improved by using more advanced algorithms or machine learning models that can detect and blur facial features with greater accuracy.

Methodology



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The original Image

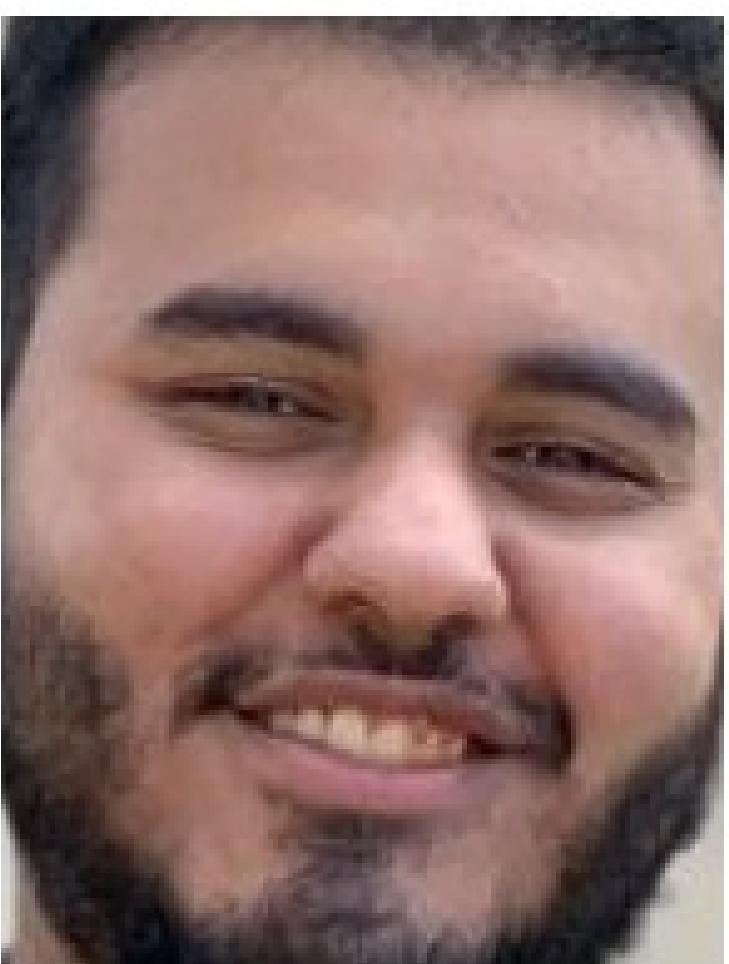
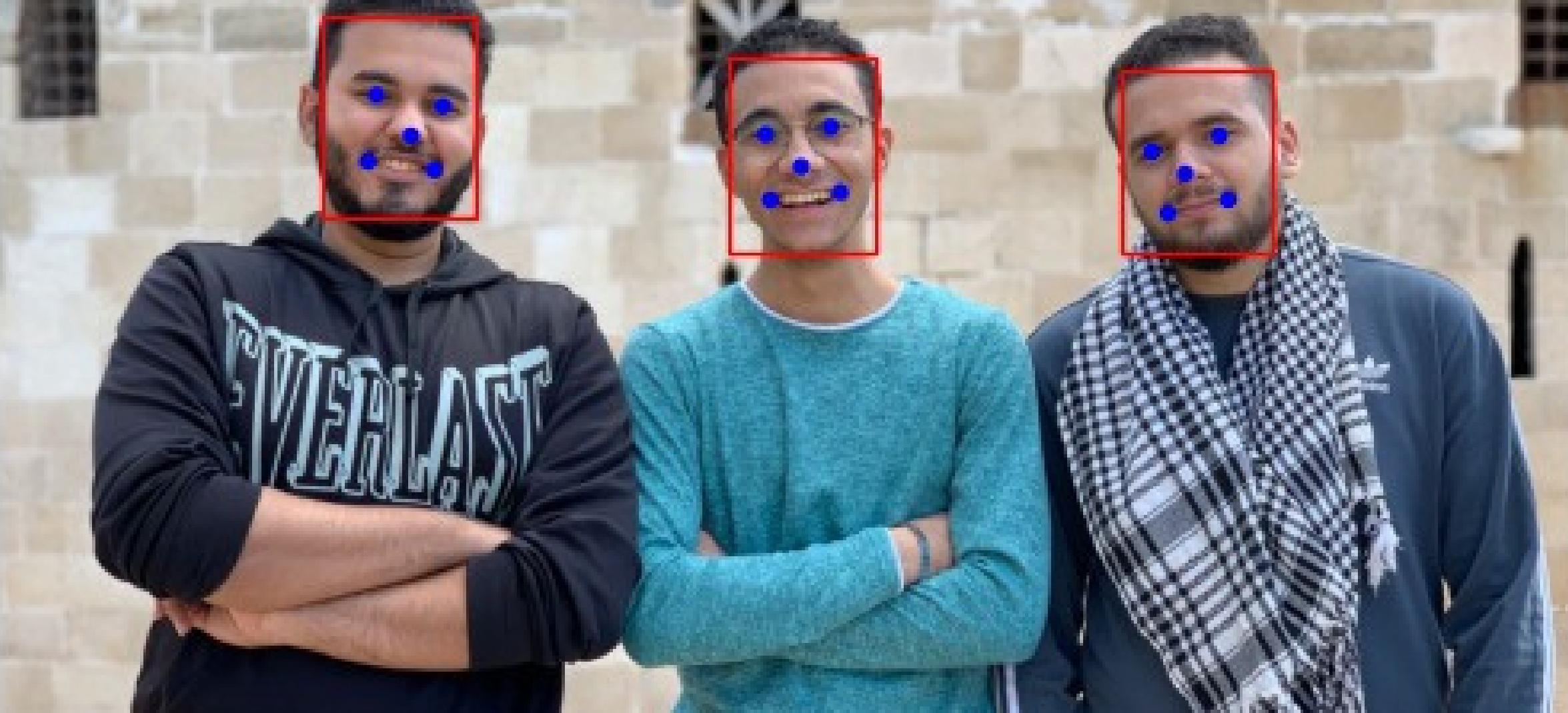


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Identify every face in the image
using segmentation image.

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Detection of facial features:
The first step is to use computer vision algorithms or software to detect the facial features in the image or video frame, such as eyes, nose, and mouth.



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Every Face



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Blurring of facial features: The next step is to apply a blur filter to the detected facial features, making them unrecognizable while preserving the rest of the image or video frame.



Try it on Video

01

The original Video



02

Face Blurring on Video



Quality assurance

The quality assurance process is function of bringing computers into quality control in place of the factory staff. After blurring the facial features, the image or video frame needs to be inspected to ensure that the blurring is effective and that no identifying features are visible.

Overall,

Integration with other privacy protection measures: Face blurring is often used in conjunction with other privacy protection measures, such as encryption, consent, and limited sharing of personal information.

The objectives of face blurring for privacy protection are to balance the need for privacy and security with the legitimate uses of images and videos that contain personal data.

Thank You