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A Survey Paper on Sketch to Face Recognition by using Machine Learning

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Abstract: Our goal is to create a tool that assists forensic investigators in accurately identifying victims. However, police sketching tactics are a common component of law enforcement investigations and are frequently used to identify suspects from the recollection of an eyewitness. This time-honored method of identification is typically laborious and slow, and it could not result in the appropriate criminal being apprehended. In order to accurately identify the criminal from a collection of face photos, an automatic face sketch identification system is needed. Because faces and sketches are produced from many sources and have varied gaps to be filled at low and high levels, such technology design presents an open research problem. Although other approaches have been suggested, we are not aware of any surveys on this specific subject. Measuring the performance of new systems and of current systems becomes extremely critical as we propose new algorithms and construct more systems. Below is an overview of systematic data collecting and evaluation of facial recognition systems. It can be difficult to identify a 3D item from its 2D representation. For appearance- or image-based techniques, the posture and illumination concerns are two significant problems. To address these difficulties, numerous strategies have been put forth, the bulk of which focus on domain knowledge.

Keywords: Face-Recognition, Artificial Neural Network(ANN), convolution neural network (CNN), Multi-Scale local binary pattern (MLBP)

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