

Facial Recognition Technology (FRT) For Commercial Identification And Marketing

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Facial Recognition and the Growth of Commercial Identification

The facial recognition system (FRS) is an application installed on computers to help in verifying or identifying an individual from a video frame or a digital image. The application has become a common source of providing security in diverse places based on its efficiency. The recognition system can be linked to diverse biometric security systems like fingerprint scanning and the eye iris recognition system. Its incorporation into various places has made it a standard commercial identification and marketing tool.

With advancements in technology, facial recognition systems have also advanced in the essence that they have become more efficient. This is evident through 3-dimensional recognition, which has been used to enhance FRS through improved accuracy. The technique involves the use of 3D sensors that capture the diverse details relevant to a face, which is essential in identifying the person being analyzed. Through the 3D dimensional system, distinctive features such as the nose, chin, and eye socket curves are used to analyze people (PR Newswire, 2016). An advantage of the 3D recognition system is its efficiency, given that it is not affected by changes in lighting compared to other methods (Wireless News, 2015). This is because it can analyze an individual's face from different angles. Accuracy in identification through the use of 3D facial recognition is influenced by advanced sensors, which have a substantial impact on capturing 3D facial imagery. The sensors in 3D facial recognition are designed to project structured light onto the face of an individual.

Skin texture analysis is also another technique used in facial recognition systems. Through this, the visual details visible through the skin captured through standard images are used to determine the identity of a person. The technique creates a mathematical space in which diverse patterns and spots visible through the skin are analyzed. The use of skin texture analysis has been termed to be crucial in improving the results of facial recognition.

Biometric Efficiency, Passive Identification, and Marketing Applications

Despite the effectiveness of the use of facial recognition compared to other forms of biometric recognition, FRS is effective in the essence that it is not dependent on the cooperation of the

individual in question to work. Proper installation of the system has proved to be effective in scanning individuals without them even being aware. Its efficiency is also evident, given that it can perform mass identification, unlike other systems of biometric recognition like fingerprints, speech recognition and iris scanning (Wireless News, 2015). Its performance has proved to be relevant despite speculations, given the few mishaps that exist in its use in airports and railway stations.

Challenges in the system are evident when it tussles to accomplish its purpose under particular conditions. One of the challenges is that it fails to give proper results in instances where the subject may be 20 degrees off the frontal angle. Another challenge is the inability to give an accurate picture under poor lighting in instances where the individuals may be covering their faces, sunglasses, long hair, and subjects in low-resolution images. Facial expressions have also been established to be a limiting factor in the use of the system. This is evident in countries such as Canada, which have limited expressions made on a passport to neutral. This has been done to ensure that the system is efficient, given that it is the most preferred biometric security system as it facilitates mass identification.

Despite the role of this system in enhancing security, the use of surveillance technologies has, in recent times, been under heavy criticism. This is evident through the various organizations that have lobbied campaigns to express their concerns on what they deem a violation of the fundamental right to privacy. People evidently fear that through the use of a facial recognition system, the government has the capacity to know the activities and whereabouts of every individual at all times. Despite the primary use of facial recognition systems to unearth the identity of an individual, the system could also result in the disclosing of personal information. Such information could be used on tabloids to reveal personal information that is not relevant to the purpose of identity verification (Downen, 2008). For this reason, some people have hidden their faces whenever they encounter cameras in public spaces. Information acquired from facial recognition systems could also be analyzed through databases such as social media images with many images. Analyzing data through social media databases in any instance could be a huge violation of people's privacy.

Meetings have also been held by various boards to address what the increasing use of facial recognition systems means for privacy and civil rights. Guidelines have further been put in place to regulate the use of facial recognition systems by private companies. Recent talks have resulted in heated debates where lobbyists are against the system, given that it leads to the disclosure of personal information without consent, which is fairly unethical. The National Telecommunication and Information Association has been engaged in talks with lobbyists and private representatives to develop strategies to regulate and limit the use of the system.

Privacy Law, BIPA, and the Regulation of Facial

Data

Several jurisdictions regulate the collection and use of biometric information. Illinois' Biometric Information Privacy Act (BIPA) was enacted in 2008, so it is not a newly established law. The Act requires specified notices, policies and consent practices for private entities handling covered biometric identifiers and information. Public Act 103-0769 amended BIPA in 2024, including recognition of electronic signatures and rules that generally limit damages for repeated collection or disclosure using the same method to a single violation. Court outcomes depend on jurisdiction, standing, statutory coverage and the facts of each case.

Despite the challenges that may exist in the use of facial recognition, improvement is constantly being made with advancements in technology. The ATM use described by the 2016 PR Newswire source was an emerging application at that time and should be presented as a historical pilot or development rather than something "currently underway." Facial recognition can be used to compare a customer's captured image with an enrolled identity record, but present-day deployment varies by bank, jurisdiction, privacy law and security design. Facial recognition has also advanced, and it is currently being used as unlock software on mobile phones.

Given the diverse factors that have been evaluated, it is evident that facial recognition is quite efficient and will continue to advance in the future; thus, there is a need to invest in the system. This is because facial recognition will be a very effective security for any organization with the advancements being made.

Sincerely,

"Charles Mbau"

Administrative Assistant.

Reference

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