## **Facial Recognition**

What are the main components of facial recognition? One of the three major components of facial recognition is detection which is the process of locating a face in an input image. Analyzing is also used for mapping out the features and differences of each face. Additionally, recognition is the most important component because it is what determines the person's identity from the input image. Facial Recognition uses computer vision to enhance the accuracy and effectiveness of the image you are looking into so that there are no issues throughout the process.

Facial Recognition is being used everywhere in our everyday lives now. Whether it is with our phone, which now uses facial recognition to only give us access to it or even some of the newer surveillance cameras for home that will function for opening your gates or doors simply by seeing you. There are also different types of safes available now for things like money, jewelry and weapons that are also using facial recognition features and are just as effective as having a key.

Facial recognition uses many computer visualizing tools such as unique image recognition and artificial intelligence algorithms. The images recognized are then turned into numerical expressions for comparison and making sure to catch all the similarities and differences within an image so that there are no mistakes. This is done by creating a map with different facial features that are known as facial signatures. Finally, the facial signatures are compared to a database to determine similarities or differences, and a match is then found for each identity. There are numerous benefits when it comes to facial recognition like improved security, better customer experience and more efficient and effective data management. On the other hand, there are also some negative effects about facial recognition such as, invasion of privacy,

legal documents or ethical concerns that could lead to more serious problems. In conclusion, Facial Recognition is very important considering that mostly everything is run by technology nowadays. Facial Recognition was also very beneficial and played a huge role all around the world when the Covid-19 pandemic hit back in 2020. For example, it was being used for pandemic control and access to places like airports and offices since many people couldn't be in physical contact with each other. In addition, I do believe that facial and image recognition will continue to improve and evolve because everything is technology nowadays and it is already so advanced. Therefore, I think facial recognition will outlasts us and will even be used for vehicles in no time now that we even have self-driven vehicles in the markets.