Facial Recognition and Image Processing

In this era of information, security for your telecommunication devices and other private information has become more and more important however keeping that private information secure has become a great risk. One example is the leak of personal information of celebrities and other people from different websites and forums .There have been a lot of inventions for improving the security to your personal information, but then there are hackers who can hack into your passwords and pattern locks. Facial recognition is a tool that is one of the strongest piece of security for your device. Facial recognition system is a software that matches the shape and facial features of your face to a picture or video that you had already stored in the system. It is mostly used for securing important information or getting access to a certain area but now a days media companies are also using facial recognition and image processing to improve their video quality and to add CGI content to their movies.

Image processing plays a great role in facial recognition system. Government agencies use image processing in order to improve the quality of photos that they possess. Facial recognition and image processing complement each other one without the other is almost useless. If facial recognition software doesn't have a good image processing system then it would face a lot of problems while identifying a person. Better image processing results in better facial recognition. Same way if your image processing system is good but the facial recognition system is outdated then still it might face a lot of problems.

Facial recognition tools are also used by federal agencies to track targets by matching the facial features of their target to the video or images that they have. Facial recognition is of two types, the first one is 2D facial recognition which deals with the facial recognition of a two dimensional image where as 3D facial recognition adds up a lot of variables like facial expressions and face positions to the identification process. Facial recognition might be a very good tool for security but there are still some loop holes as people who have videos of you, can in a lot of ways break into your system. Facial recognition is a relatively new technology and is more expensive than simple pattern locks. It is used in areas with high security. Some lighter versions of the technology can be used on laptops and mobile phones but these lighter and inexpensive versions of the software sometimes have problems in identifying the person if he is wearing a beard or if he has a different hairstyle than before. Facial recognition system is also used in robots with artificial intelligence to perform the function of eyes. A good facial recognition system is one that can identify a human being not just on the basis of his physical appearance but also on the structure of the face and position and movement of the face muscles. Nevertheless Information technology is reaching new heights every minute, so there is no denying that facial recognition would become a very common and necessary security tool in the near future. It might even replace the old key locks in our homes and cars.