

What is Facial Recognition? How does it work?

Facial recognition is a way in which an individual can be identified, or it can confirm an individual's identity through the use of their face. This mechanism can be used in photos, videos, and in real life. It is a form of biometric security, the use of biological measurements and physical characteristics to identify a person. Typically facial recognition follows a 4 step operation:



1

Face Detection

- camera detects and locates the face or an image
- can be completed on both an individual or in a crowd
- completion upon profile view or head on view of person

Face Analysis

- image of face is captured and analyzed
- programming relies on 2D imaging
- software reads geometry of persons face
- aim is to recognize distinguishing factors of persons face

2



Converting the Image to Data

- takes the face and transforms it into a set of data
- face is essentially turned into a mathematical formula
- creates a numerical code called a "faceprint"

3



Finding a Match

- Faceprint is now compared to a database of other known faces looking for a match

4

