

Facial Recognition

The New Science of Identity

Our face is the most fundamental form of identification. Advanced technology has made it possible to capture, analyse and compare facial biometric data, introducing a new secure, fast and convenient form of identification.



Why facial recognition?

In a world of digital services, issues with identity and authentication pose a problem. Traditional paper-based forms of identity aren't well-suited to a digital setting and other forms of ID, such as passwords, are flawed in isolation. Here are five reasons why facial recognition has the answer:



It's non intrusive as there's no physical interaction by the user



It's relatively easy to deploy and implement



Technology costs – cameras, processing – are falling



Mass adoption by smartphone makers has made it familiar to users



Its results are accurate and fast

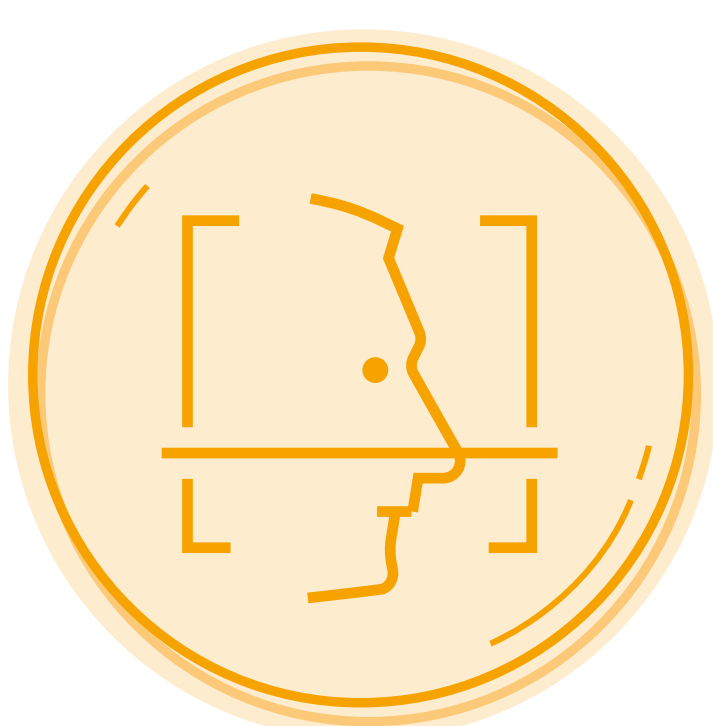
How does it work?

Facial recognition is a type of physiological biometric technology which literally measures your face, including the placement of your eyes, contour of the lips and the width of your nose. Liveness detection software is used to check blinking and face motion. Here's how it works:



1.

Sensors capture a face in 2D or 3D



2.

Distances between eyes, nose, mouth and jaw are measured



3.

These distances are converted into a data set



4.

The data set is compared on a database until a match is made



5.

This is an augmented replica of how the process works in our brains

Facial recognition in action

Your face is the most flexible biometric authentication modality, which makes it easy to use in different context and settings.



Airports around the world have set up face matching systems to help board passengers faster and more safely



Most of us are now used to accessing our mobile banking apps using Face ID. But what about using ATMs? Facial recognition allows us to quickly and safely get cash from ATMs



Many casinos now use facial recognition to deny entry to problem gamblers who have requested to be barred from specific venues by comparing their face to a voluntary photo of themselves they've provided



Hotel check-ins can often take a long time. This can be frustrating for guests and staff alike. Facial recognition could allow guests to skip front desk lines and enjoy their stay



Facial recognition can enhance event security when linked to mobile apps, which enable staff to make secondary face-to-face ID verification checks



To find out more about facial recognition, head over to our dedicated page:

<https://www.thalesgroup.com/en/markets/digital-identity-and-security/government/inspired/facial-recognition>