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Unmistakable.

(iris scanning technology)(Brief Article)

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Your eyes could soon be opening doors for you

FORGET passports and driving licences. Soon the only proof of identity you'll need is your eyes. A study published this week confirms that iris scans are faster and more accurate than any other computerised means of identifying people, such as fingerprint, face or voice recognition.

Most iris recognition systems are based on software created by John Daugman of Cambridge University. An image of an iris, with all the tiny pits, ridges and strings of tissue that make it unique, is turned into a series of three-dimensional contour maps. Then this information is compressed into a code of is and Os just 2048 digits long. This code can be stored or checked against existing records in a database for a match.

Daugman has used this system to make 2.3 million random comparisons between images of over 2000 different irises from people in Britain, the US and Japan. The study shows that if two codes match by 75 per cent or more, there's only a 1 in 1000 billion chance that the match is wrong. With just 12 billion human eyes on the planet, that's quite secure.

In another recent trial by the British government, there were no false matches in over 2 million tests, whereas the failure rate for other methods such as voice recognition ranged from 10 to 25 per cent. And an Eye Ticket Corporation project at an airport in North Carolina has correctly identified half a million volunteers with no mismatches since May last year.

Such results prompted the International Air Transport Association to encourage London's Heathrow airport to try using iris scans for ticket and immigration control, in the hope of speeding up check-ins. The scans can be done with a video camera in a few seconds. A pilot project, run by Eye Ticket, will begin in October with a group of frequent travellers who are a low security risk.

"Our aim isn't to replace immigration staff, it's to add to it," says Anna

Dorricott, a spokeswoman for Britain's immigration department. It is interested in the method, but is waiting for the results of the trial. "We're standing back and just watching."

But John Tincey of the Immigration Service Union says that while the scan checks people's identities, it doesn't assess their intentions. He says it should only ever be used for a select group of people, such as frequent business flyers.

Daugman admits that the evidence for irises staying the same with age isn't extensive. "But I have seen ophthalmologists' photographs of irises taken 25 years apart, and I could see no changes of any details."

As for hacking out someone's eyeball and holding it up to the camera, Daugman says this wouldn't work. "The pupil dilates to as much as 80 per cent, and the cornea turns cloudy," he says, and both effects are easily detectable. "Believe it or not, this was actually the first question that the FBI and NSA gumshoes asked me."

Curved contact lenses used to mimic an iris can also be distinguished from real iris, which is nearly flat, he says.

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