iProov Genuine Presence Assurance

Andrew Bud CBE, FREng, FIET
Founder and CEO, iProov

16 June 2022

Company Overview

Global Leader in Genuine Presence Assurance

- 23 granted patents
- 150+ employees; London, Washington DC & Singapore
- Operating at scale, up to 1m verifications a day worldwide

Governance

- eIDAS QTSSP certified
- Security audited by numerous national governments

Proven at Scale

- Production deployments with Governments of US, UK, Australia & Singapore
- In deployment with DHS CBP for entry and exit programme
- Eurostar

Multiple Bottlenecks Cause Travel Pain Points

- Entry checks impose pressure on limited time & space

- New data capture requirements will increase issues

- iProov/Entrust pilot mitigated challenges for Eurostar in London

Security Starts at Home: On the Couch

- Move key process from gate to couch:

  - Securing trust from the couch

    - Trusted document capture

    - Trusted face capture

- Ensure secure & private flow of biometrics & data from couch to port of entry/exit

- Significant benefits to traveller & border control

Securing Trust from the Couch

Trusted Document Capture on BYOD

- Couch capture allows for sufficient time to read NFC
- If necessary, ultra-rapid confirmation of document possession at the border
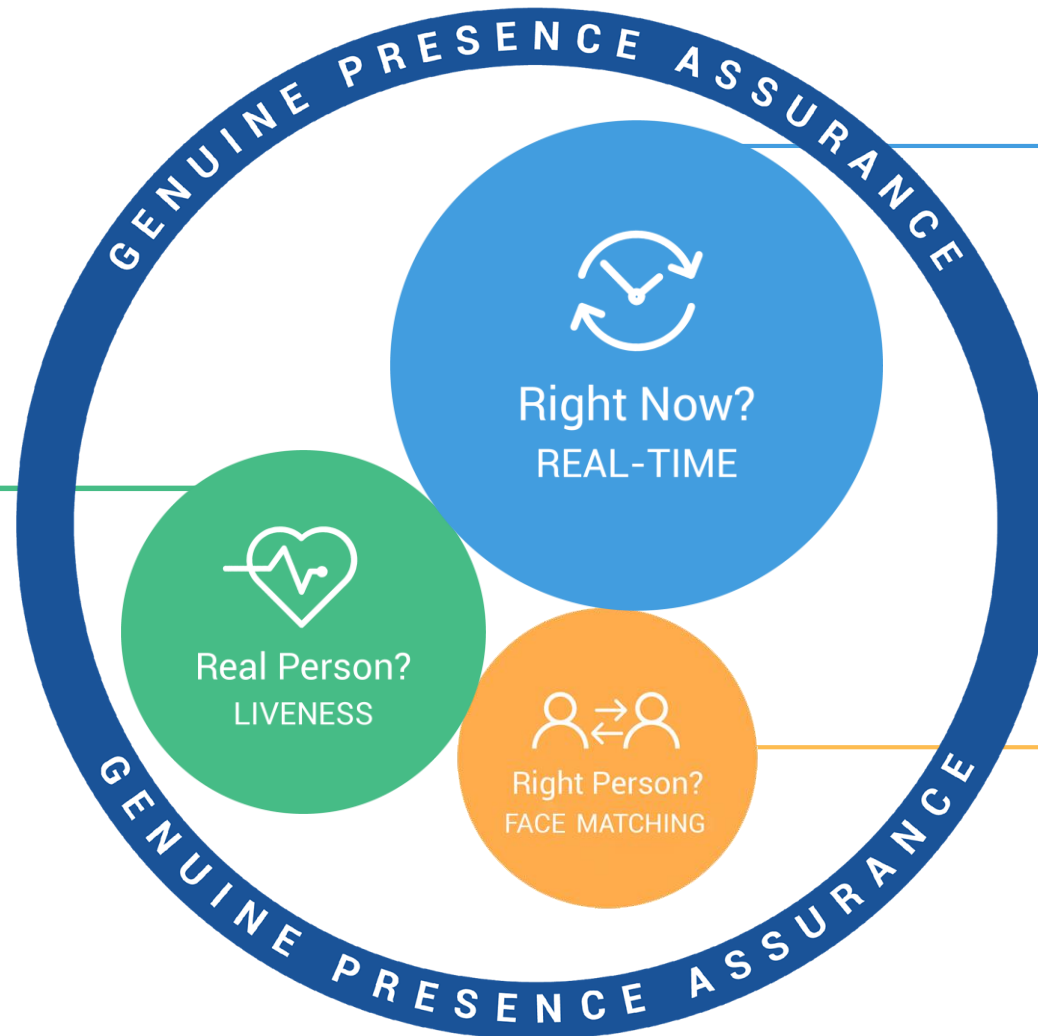
Trusted Face Capture on BYOD

- Genuine face assurance:
    - For accurate match between selfie & document holder
    - For genuine capture of contemporary image of the user
- Defend against morphed selfies

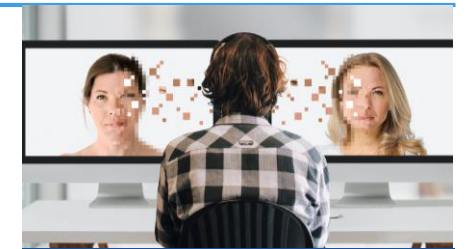# Mitigating Threats to Biometric Verification on BYOD

Digital Injection Attacks

Injected replays, synthetic imagery and morphs

Presentation Attacks

Artefacts presented to the camera

Impersonation Attacks

Wrong person

GENUINE PRESENCE ASSURANCE

Right Now?
REAL-TIME
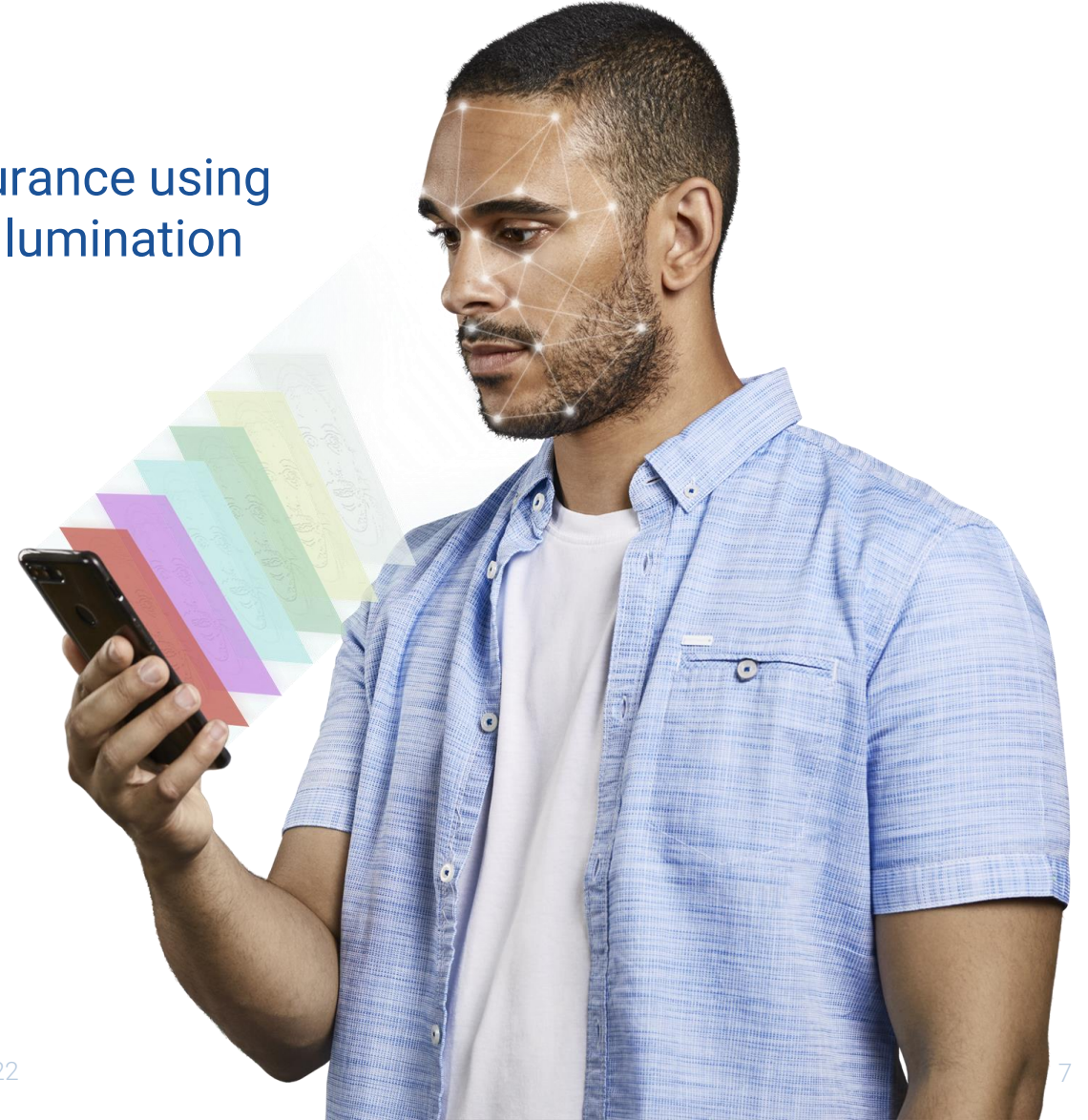
Real Person?
LIVENESS

Right Person?
FACE MATCHING

iProov One-time Biometric Technology
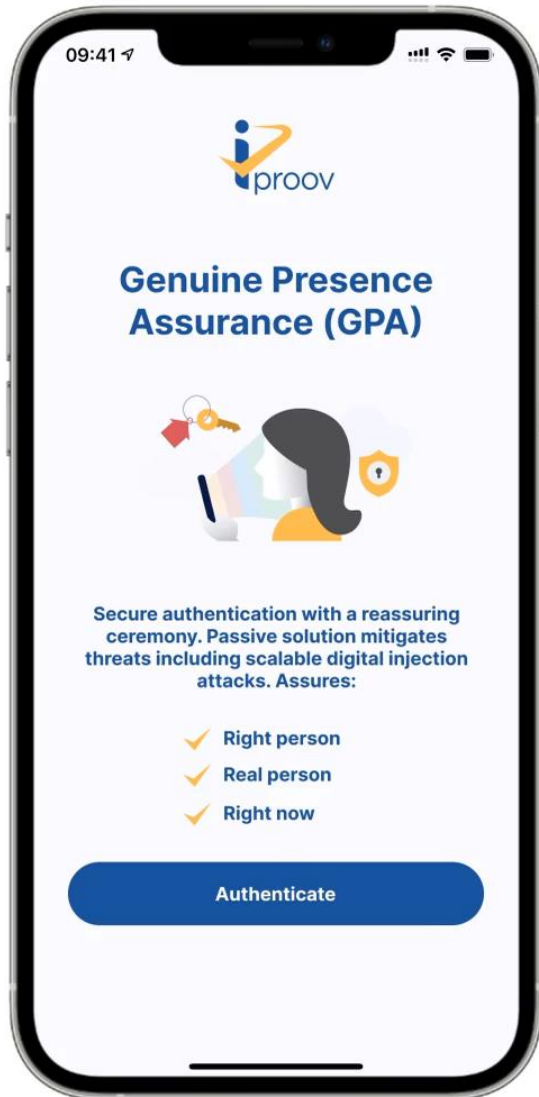
Passive assurance using controlled illumination

Delivering Excellent User Experience

- Success rates >98%

- High completion rate

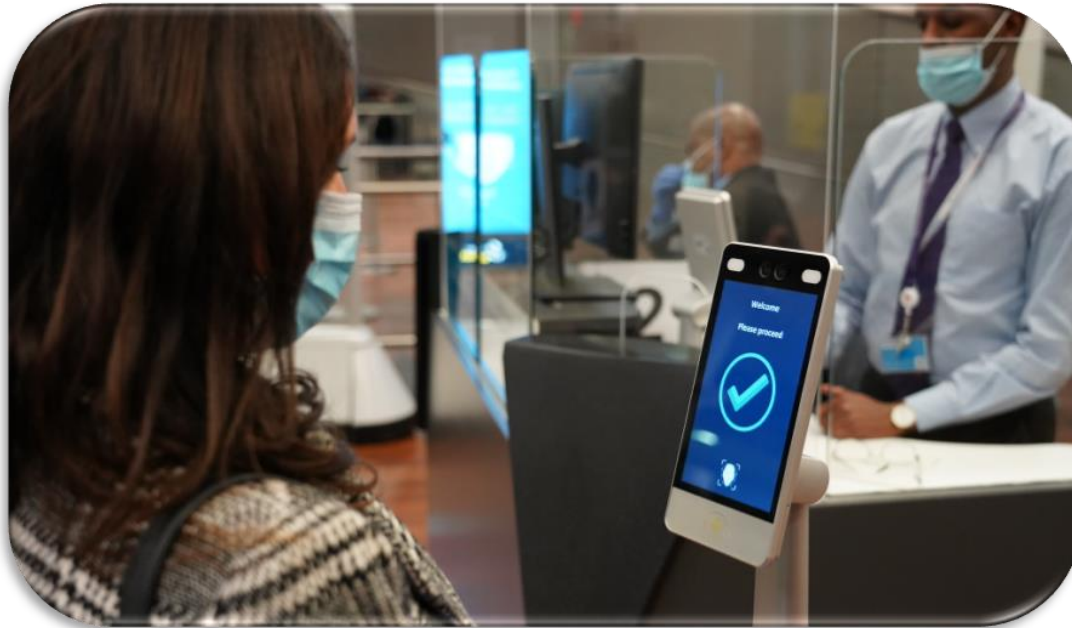- Inclusion & bias mitigation

- Reassurance & trust

Security Monitoring is Crucial

- Liveness and genuine presence are cyber defences

- Exploits are inevitable

- Threats evolve

- Security monitoring needed to detect biometric vulnerabilities

- Privacy management is essential

Use a Trusted Selfie to Link Identity Information

- Short processing time enables very high throughput

- Limited subject set minimises demands on face matching

- Use of contemporary selfie is key to performance

Fast and Secure ID Verification for Seamless Rail Travel

Your face as your ticket; maximising privacy and customer experience with assured credentials

Eurostar SmartCheck revolutionises the travel experience with biometric face verification:

- Passengers complete secure ticket verification and pre-boarding checks online prior to travel

- Assuring the genuine presence of the passenger when creating the travel credential

- Improving customer satisfaction by eliminating queues and expediting the boarding process

" *The brand new contactless travel technology from iProov and Eurostar is a window into the future of border control, of smoother, more seamless and convenient journeys.* "
Grant Shapps
UK Transport Secretary

Authentication for Secure and Efficient Border Crossing

Authenticate users to quickly and securely cross borders without the need for CBP officer attendance

Enables travellers to quickly transit remote border ports of entry and exit

- Using secure, privacy focused, mobile application

- No direct CBP engagement, either in person or online needed

- Stringent security requirements, certified by Red Team testing

© iProov 2022
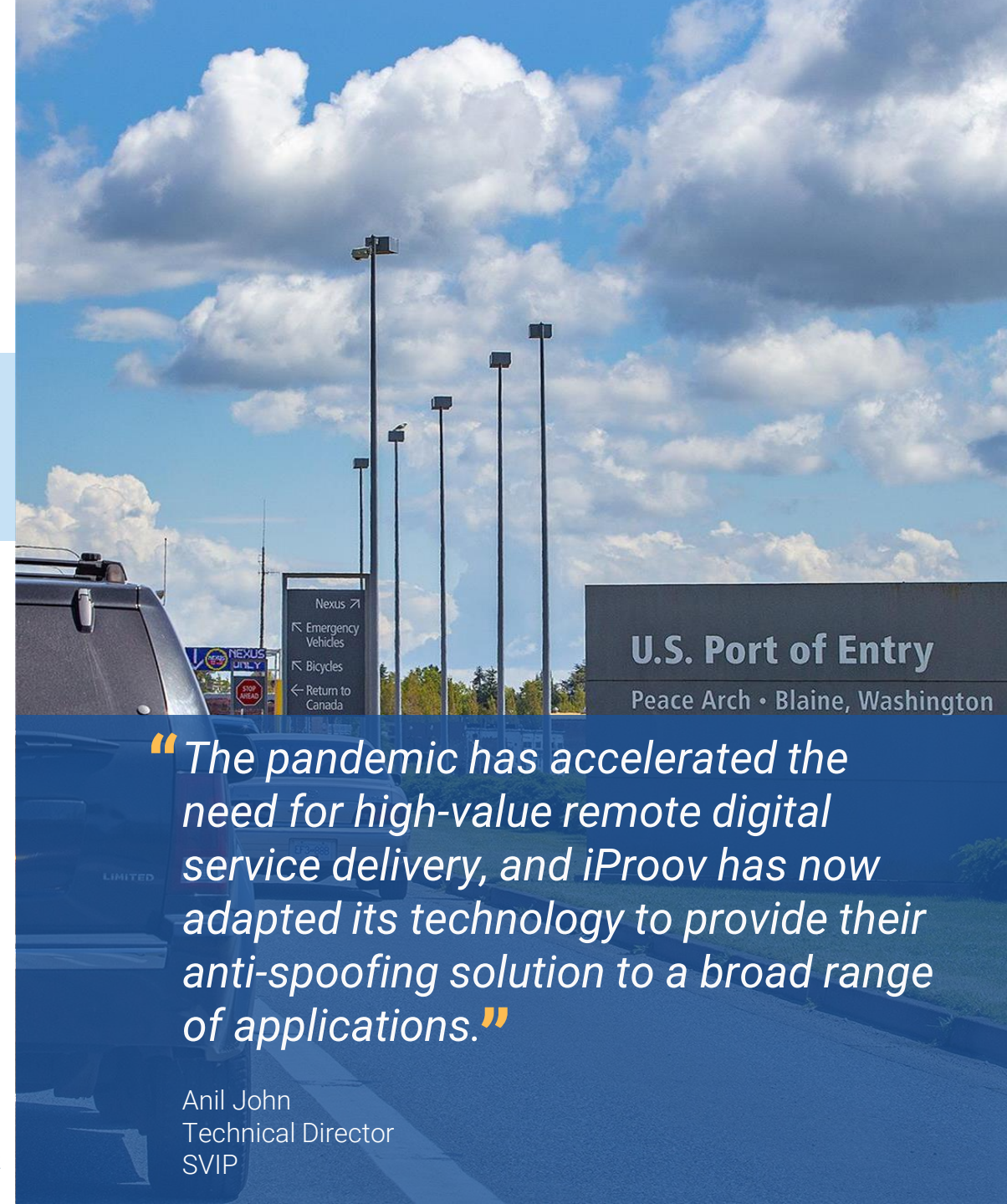
U.S. Port of Entry
Peace Arch · Blaine, Washington

"*The pandemic has accelerated the need for high-value remote digital service delivery, and iProov has now adapted its technology to provide their anti-spoofing solution to a broad range of applications.*"

Anil John
Technical Director
SVIP

iProov Key Differentiators

Usability, inclusivity and privacy

- Effortless, passive with no verbal instructions. Inclusive of age, gender, ethnicity and cognitive ability

Security & resilience

- Red team tested. Verified by US, UK, Singapore and Australian governments as part of their national due diligence

Large commercial & national scale deployments

- Deployed in America, UK, Europe, Asia and Australian public and private sectors

iProov Security Operations Centre (iSOC)

- Real-time active threat management combats current and future threats

Underpinned by extensive governance

- Technology and business is regularly audited to industry standards

Thank you

Genuine Presence Assurance

Right person, Real person, Right now

Andrew Bud CBE FREng FIET

Founder & CEO, iProov

contact@iproov.com