

ICAO Compliant Mobile and Web Face Capture

Vishesh Mistry
Research Scientist, TECH5



We are the experts in **biometrics**, constantly **innovating** in the field of **Digital Identity**.



20+

Countries of presence



3

Core technologies



R&D

In the USA, Asia and Europe



Challenges in Achieving Compliance

- Users normally have to go to a studio or biometrics collection centre
- Remote capture is the way forward
- Has issues – lighting, pose, expression, etc.





TECH [5][®]
Technologies for Inclusion

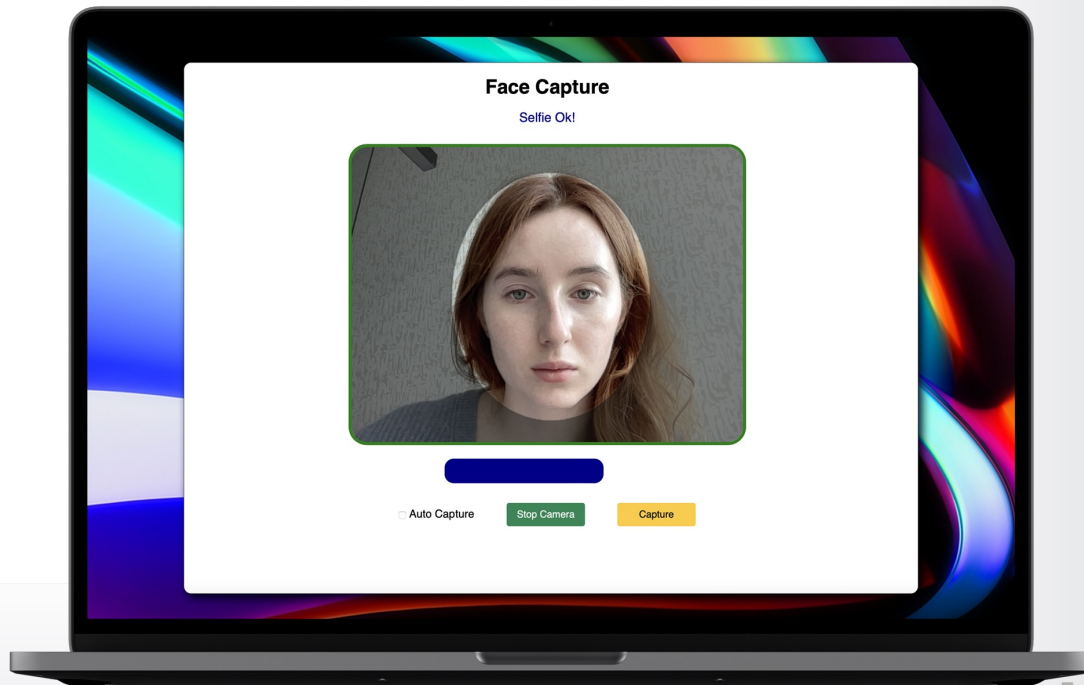
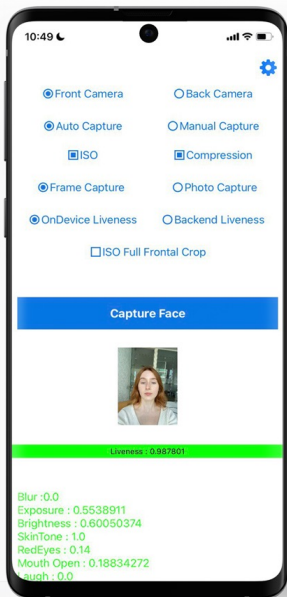
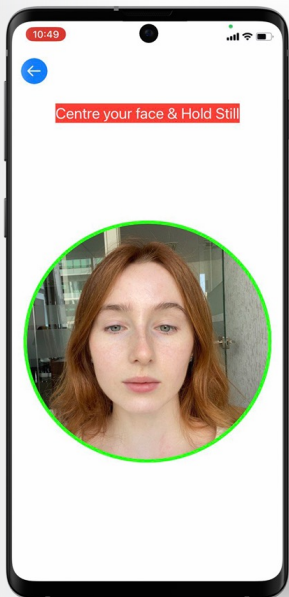


T5-AirSnap

T5-AirSnap Face allows detection and capture of face within seconds using the camera of a standard mobile phone or computer.

Applicable for onboarding, verification and law enforcement applications.





 **Yaw, pitch, and roll**

D.1.4.3.1, D.2.3.1

 **Eyes closed**

D.1.4.3.3, D.1.4.3.7, D.2.3.7

 **Sunglasses**

D.1.4.3.4, D.2.3.7

 **Mask detection**

D.1.4.3.6

 **Multiple faces detection**

 **Brisque**

D.1.4.2.10

 **Distance between eyes**

D.1.4.2.3, D.1.4.2.4, D.2.4.8, D.2.5.4



Hot spot

D.2.3.6



Mouth open

D.1.4.3.2, D.2.3.2



Uniform background

D.1.4.2.5



MRTD full frontal crop

D.1.4.4, D.2.4.9 to D.2.4.13



Skin tone

D.1.4.2.9, D.2.4.5



Brightness/Contrast

D.1.4.2.5, D.1.4.2.7,
D.2.4.2



Uniform illumination

D.1.4.2.6, D.2.3.5



Compression

D.1.4.2.4, D.1.4.2.8,
D.1.5.5, D.2.4.4, D.2.5.2



Red eyes

D.1.4.2.9, D.2.4.5



Blur

D.2.4.3



Background color

D.1.4.2.5



Background segmentation



Smile

D.1.4.3.2, D.2.3.2



**Face-to-background
difference**

RAW



POST PROCESSING



The Way Forward!

- Multi-modal biometrics capture and verification using smartphones
- Self sovereign digital wallet

Thank you!

Please contact:
sales.usa@tech5-sa.com

