11 January 2022

To whom it may concern,

iBeta Quality Assurance conducted Presentation Attack Detection (PAD) testing in accordance with ISO/IEC 30107-3. iBeta is accredited by NIST/NVLAP (NVLAP Lab Code: 200962) to test and provide results to this PAD standard (certificate and scope may be downloaded from the NVLAP website).

This testing was conducted with the Unissey Liveness solution version 1.4.0. The application uses passive liveness detection. Testing was conducted from 15 December 2021 through 6 January 2022 on one smartphone (Samsung Galaxy S20 running Android 10) and one laptop (HP laptop running Windows 10 Home).

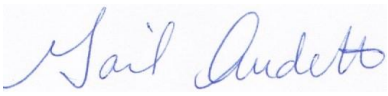
Testing was conducted in accordance with the contract for a level of spoofing technique that utilized materials available for under $300 (USD), and which artefacts of the genuine biometric could be created in less than 24 hours, for use in the presentation attack. The subjects for the test effort were cooperative – meaning that they were willing and able to provide any and all biometric samples. The test time for each PAD test per subject was limited to 24 hours and the artefacts consisted of latex masks, inexpensive silicone masks, transparency photos, 3D animation software, and handmade masks from 2D photos. This is considered a Level 2 PAD test effort (second of three levels).

The test method was to apply 1 bona fide subject presentation that alternated with 3 presentations of each species resulting in 150 Presentation Attacks (PAs) and 50 bona fide presentations per artefact per device. The application displayed a successful message that stated "Success" for the bona fide as well as a “Fail” message for the non-live person and live person.

On both the Samsung Galaxy S20 and HP laptop used in the test, iBeta was unable to gain a liveness classification (simulated enrollment) with a presentation attack of 150 times with each species of attack per device. With 150 transaction attempts for each species per device, the total number of attacks for both devices were 1500 and the Attack Presentation Classification Error Rate (APCER) was 0%. The Bona Fide Presentation Classification Error Rate (BPCER) was also calculated and may be found in the final report.

The Unissey Liveness solution version 1.4.0 was tested by iBeta to the ISO 30107-3 Biometric Presentation Attack Detection Standard and passed Level 2 on both the Galaxy S20 and HP Laptop.

Best regards,



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