The Department of Electrical and Electronic Engineering of the University of Cagliari is proud to announce the sixth edition of the International Fingerprint Liveness Detection Competition - Algorithms Part – "Fingerprint Liveness Detection in Action"[1].
http://livdet.diee.unica.it/

The widespread use of personal verification systems based on fingerprints has shown some security issues. Among the others, it is well-known that a fingerprint verification system can be deceived by submitting artificial reproductions of fingerprints made up of silicon or gelatine to the electronic capture device (optical, capacitive, etc...). These images are then processed as "true" fingerprints. These are known as spoofing or presentation attacks.
Therefore, a recent issue in the field of security in fingerprint verification (unsupervised especially) is known as "liveness detection" or "presentation attacks detection".

In this edition of LivDet, beside the traditional treatment of the problem a two-class classification problem (live or fake), we want to investigate at which extent the integration of a liveness detector can impact, at the state-of-the-art, on the whole performance of a fingerprint verification system. Therefore, competitors will be invited to submit a complete algorithm able not only to output the the probability of the image vitality given the extracted set of features (the so-called "liveness score") but also an integrated match score which includes the probability above ("integrated score"), on which basis the final user acceptance/rejection is done. For this reason, this edition is devoted to the fingerprint presentation attacks (liveness) detection "in action".
The LivDet 2019 competition is open to all academic and industrial institutions which have a solution for software-based fingerprint vitality detection and verification problem. Each participant is invited to submit its algorithm in a Win32 console application. The performance will be evaluated by utilizing a very large data set of "fake" and "live" fingerprint images captured by three devices. The performance rank will be compiled and published in this site. The goal of the competition is to compare different methodologies for software-based fingerprint liveness detection and verification with a common experimental protocol and data set. The ambition of the competition is to set the current technological state-of-the-art for academic and industrial research, although it cannot be considered as an official system for quality certification of the proposed solutions.

IMPORTANT DATES for the Algorithms Part
Deadlines:
Registration: December 14th, 2018
Algorithm submission: January, 31th, 2019.

The LivDet competition conclusion and winners proclaiming by March, 15th, 2019.
The training-set will be made available to registered users after the registration deadline.

Further information can be found in the Livdet webiste:
http://livdet.diee.unica.it
Please do not esitate to contact us for any question.

Gian Luca Marcialis
Team leader of the LivDet staff

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1 The "Fingerprint Liveness Detection in Action" name was inspired by the paper "Anti-spoofing in Action: Joint Operation with a Verification System", I. Chingovska, A. Anjos and S. Marcel, IEEE CVPR Workshop, pp. 98-104, doi: 10.1109/CVPRW.2013.22, 2013.