EAB Newsletter January 30, 2019

SC37 plenary approves to run DIS ballot on new passport standard 39794

In the 17th plenary meeting of the ISO/IEC JTC 1/SC 37 on Biometrics the suggestion of WG3 was approved to run a ballot on the second Draft International Standards (DIS) of the new passport standard ISO/IEC 39794-1, Extensible biometric data interchange formats - Part1:

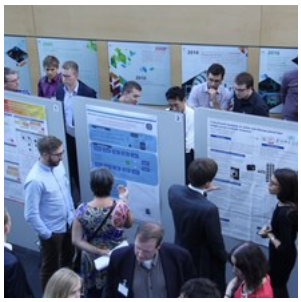
Full story

Biometric challenges in the age of the GDPR

As the world is quickly moving into the Fourth Industrial Era, more people put more of their personal data and that of their devices online. In this vast digital landscape, a wide range of private companies and government agencies collect, process and (re-)sell this data, and establish digital

Full story

Darmstadt Biometric Week in September 2019 announced



While you are planning the year ahead, please consider in your schedule the Darmstadt Biometric Week, which will take place at the premises of Fraunhofer IGD from September 16 to 20, 2019.

Full story

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Next events:

March 7, 2019: NBLAW 2019 - Norwegian Biometrics Laboratory Annual Workshop 2019

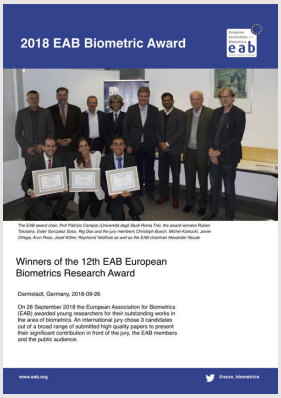
March 19, 2019: German TeleTrusT Biometrics Working Group

May 9, 2019: Norsk Biometri Forum Meeting

May 14 - 18, 2019: FG2019 - 14th IEEE International Conference on Automatic Face and Gesture Recognition

May 27 - 31, 2019: 16th International Summer School for Advanced Studies on

Special reports:



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This decision will allow that the framework standard can be reviewed once more and can be synchronized with

- ISO/IEC 39794-4 Finger image data
- ISO/IEC 39794-5 Face image data

The set of these three standards will after this last commenting round be promoted to Final Draft International Standard (FDIS), which will be a decision to be taken at the next WG3 meeting on July 8-12, 2019.

A core concept followed by this new standards series is that encoding of biometric data will be done in an extensible data structure, as it is needed for future ePassports.

The current timeline agreed with ICAO is that the new standard series is to be finalized in December 2019 such that ICAO can adopt its 9303 specification by April 2020 and then refer to ISO/IEC 39794-1, -4 and -5.

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Biometric challenges in the age of the GDPR

Finding the right balance between technical, legal and ethical demands

As the world is quickly moving into the Fourth Industrial Era, more people put more of their personal data and that of their devices online. In this vast digital landscape, a wide range of private companies and government agencies collect, process and (re-)sell this data, and establish digital identities around them.

With fingerprints, face recognition and iris scan technology, biometric systems can then authenticate and verify individuals to allow or deny access to a wide array of services. But as always, all these new developments also present a whole new range of ethical, legal and technical difficulties. Overcoming them will be one of the main challenges of our times.

Read the full blog on biometrics and GDPR by Michiel van der Veen and Els Kindt at: https://www.eab.org/files/newsletter/2019-01_EAB-Blog_MvdVeen&EKindt-Biometrics_challenges_in_the_era_of_GDPR.pdf

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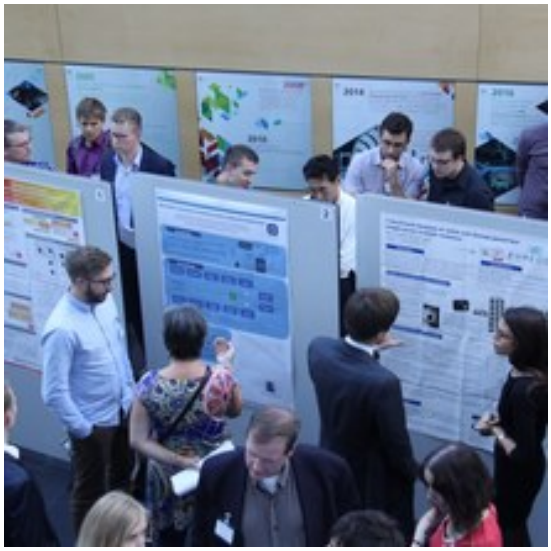
Darmstadt Biometric Week in September 2019 announced

Save the date



While you are planning the year ahead, please consider in your schedule the Darmstadt Biometric Week, which will take place at the premises of Fraunhofer IGD from September 16 to 20, 2019.

The agenda of the week will contain the following events:

1. **German TeleTrusT Biometric Working Group meeting:** The working group is an open platform dedicated to regular exchange of information and experience related to the field of biometrics. The fall 2019 meeting will take place on September 16th: https://www.eab.org/events/program/179
2. **EAB Research Projects Conference (EAB-RPC-2019):** The EAB Research Projects Conference 2019 will assemble on September 16 to 18 numerous EU sponsored research projects, to present their results. The conference is organized by the European Association for Biometrics (EAB) jointly with the European Joint Research Center (JRC). https://www.eab.org/events/program/177
3. **EAB General Assembly:** All members of EAB are invited to join us for the annual General Assembly, which takes place late afternoon September 17th. If you are not yet a member of EAB, you can sign up anytime. You can find further information at: http://www.eab.org/membership/registration.html
4. **EAB Biometrics Research and Industry Award 2019:** This prestigious award is granted annually by EAB to individuals, who have made a significant contribution to the field of biometrics research. The candidates for the award will publicly present findings of their research projects on September 18th. https://www.eab.org/events/program/180
   Applicants for the award are asked to submit a research paper and supporting information by May 15th. More information on the EAB award can be found at: http://www.eab.org/award/cfp.html
5. **IEEE BIOSIG 2019:** The 18th International Conference of the Biometrics Special Interest Group (BIOSIG) will take place from September 20 – 22, 2019. The conference will be technically co-sponsored by IEEE and papers will be added to IEEE Xplore. Stakeholders and technical experts are invited to submit original research papers by May 30th, 2019. The call for papers is available at: http://www.biosig.de/biosig-2019.html

A recommendation for those traveling from overseas: After the week in Darmstadt you can complete your travel experience, by attending the Oktoberfest in Munic.

Biometrics and Blockchain Workshops in 2019

The blockchain technology has matured over the last years and created significant attention. However for many applications and specifically those involving biometrics it is not yet clear, what the benefit of blockchains over server-based solutions is.

EAB is in preparation of two events that will discuss the benefit for blockchain technologies for biometrics. The first workshop will take place on March 7th at Norwegian Biometrics Laboratory. See the workshop program at: https://www.eab.org/events/program/172

The second event is planned for early summer this year and will take place at the University of Belgrade. That second event will be organized by the EAB national contact point for Servia, Lab for multimedia communications (mmklab.fon.bg.ac.rs). More information will be provided later.

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Amazon files patent for replay attack detection method to protect voice authentication

A patent filed by Amazon for a replay attack detection technology for biometric voice authentication systems has been published by the U.S. Patent and Trademark Office.

The filing for “Detecting replay attacks in voice-based authentication” describes a system in which a “watermark signal” is included by the device in the captured audio of a voice authentication factor spoken by the user.

“When a user speaks a voice authentication factor, a unique watermark is played in the environment in which the user is speaking,” the inventors write in the application. “Accordingly, the watermark should be captured by any surreptitious recording equipment that is recording at a relative fidelity that is high enough to accurately reproduce characteristics of the speaker’s voice.”

If a previously-used watermark is detected in the audio of an authentication attempt, the system recognizes the audio as a recording, and can optionally demand another factor, such as a PIN or fingerprint scan. In the various embodiments presented, the watermark could alternatively be used once, in effect marking the transaction as current, and never again, or could be produced at a low frequency to distinguish between a current and previous watermark.

Read more: https://www.biometricupdate.com/201901/amazon-files-patent-for-replay-attack-detection-method-to-protect-voice-authentication

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UK national surveillance camera strategy updated to address human rights, data and technology

UK Surveillance Camera Commissioner Tony Porter has updated the national surveillance camera strategy for England and Wales with a strategy plan for human rights, data, and technology, IFSEC Global reports.

The Surveillance Camera Commissioner (SCC) advisory panel will create a sub-group to explore issues related to law, operations, and technology, and existing advice and resources on human rights and liberties in related but external areas will be reviewed, as the first two deliverables in the plan. Both are targeted for completion by mid-2019. The plan also sets out goals to develop a strategy to determine and communicate the core principles of human rights related to surveillance cameras, and to integrate human rights strand work with SCC policy and other strand activities, according to the strategy document (PDF).

The national surveillance camera strategy for England and Wales was published in March, 2017 to put privacy safeguards into place and encourage best practices by CCTV network operators.

The use of facial recognition technology with CCTV networks in Britain has already sparked court cases in Cardiff and London, but James Wickes of Cloudview tells IFSEC Global that the new strategy plan is an opportunity to change the narrative around surveillance cameras.

Read more: https://www.biometricupdate.com/201901/uk-national-surveillance-camera-strategy-updated-to-address-human-rights-data-and-technology

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SC37 WG3 approves NFIQ2.1

During the working group meeting of ISO/IEC JTC1 SC37 WG3 in Iquique, Chile, the report of the Ad-Hoc Group on fingerprint sample quality implementation (NFIQ2.0) was discussed.

The report outlines the progress made with NFIQ2.0 to generate platform dependent make/solution/project files, which will support deployment of ISO/IEC 29794-4 compliant implementations. Moreover conformance test deviations for all major desktop operating systems are now minimized due to source code bugfixes. Finally build problems when using OpenCV 3.4.x instead of OpenCV 2.4.x are now resolved.

Given the approval the Ad-Hoc Group report, a final NIST test will now follow, before the revised NFIQ2 implementation will be publish in GitHub under the name of NFIQ2.1.

The NFIQ2.0 GitHub is available at: https://github.com/usnistgov/NFIQ2

For more information contact Ralph Lessmann (ralph.lessmann@crossmatch.com) or Christoph Busch (email: igd@christoph-busch.de)

SC37 Standardisation Conference Started

On January 14th, 2019 the ISO/IEC JTC1 SC37 started in Iquique, hosted by INACAP, Chile. It is the first time that this standardisation committtee is meeting in South America.

The SC37 conference started with full day with keynote speakers and poster presentation by the international researchers and students from universities and companies in Chile.
Discussion covered biometric research areas such as: Fingerprint, Iris, Face – recognition, spoofing techniques, soft-biometrics and other modalities.

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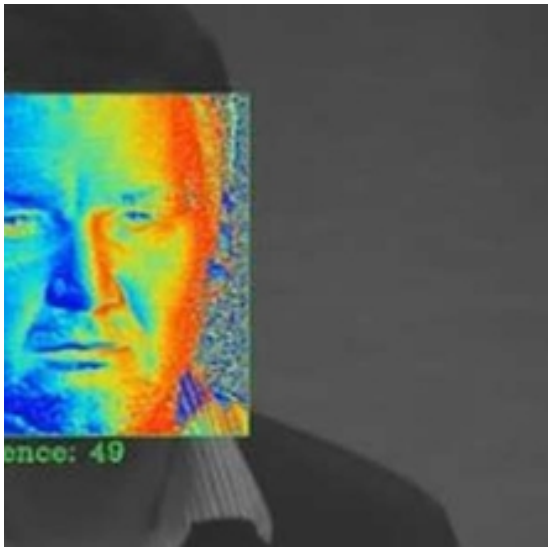
Sony's new camera tech could rival Face ID

Sony is planning to increase its production of 3D face recognition sensors



Sony sensor division chief Satoshi Yoshihara said last week that the company is planning to ramp up production of the new 3D sensors for both front and rear cameras, as several phone makers are planning to implement the new tech in their phones.

"Cameras revolutionized phones, and based on what I've seen, I have the same expectation for 3D. The pace will vary by field, but we're definitely going to see adoption of 3D. I'm certain of it," Yoshihara said.

Apart from the accuracy advantage, 3D sensors have multiple advantages. For starters, it can be used for augmented reality as well as your phone being able to better understand your gestures.

Read more: http://www.planetbiometrics.com/article-details/i/9844/desc/sonys-new-camera-tech-could-rival-face-id/

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Researchers spoof biometric palm vein recognition system with inexpensive fake

Security researchers at Chaos Communication Congress in Leipzig, Germany have demonstrated a successful spoof attack on a hand-vein biometric reader

Jan Krissler, also known as Starbug, and Julian Albrecht created the fake by removing the infrared filter from an SLR camera, and taking 2,500 pictures over 30 days to capture a useable image of veins under the subject's skin. Krissler says the photos can be taken from 5 meters away. They used the image to create a vein pattern in a model hand made out of wax, which was accepted by the biometric system.

Vein recognition is used for access control at the new headquarters of Germany's signal intelligence service, the BND.

"It makes you feel uneasy that the process is praised as a high-security system and then you modify a camera, take some cheap materials and hack it," Krissler told Motherboard. He also said he was surprised by how easy it was to make the spoof successful.

Read more: https://www.biometricupdate.com/201901/researchers-spoof-biometric-palm-vein-recognition-system-with-inexpensive-fake