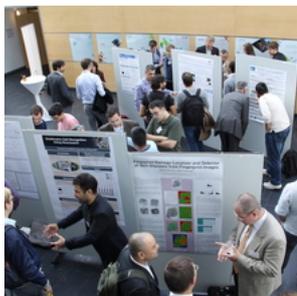


BIOSIG 2018 – submission deadline extended



The 17th International Conference of the Biometrics Special Interest Group (BIOSIG) will be held in Darmstadt, Germany, from September 26 – 28, 2018. The extended final deadline for submissions is June 19th, 2018.

[Full story](#)

Workshop on: Forming a strong EU-research consortium and proposal



Halmstad University, the Swedish Biometrics Forum, and the European Association of Biometrics are hosting a one-day workshop on 8th June near Copenhagen Airport during which we will brain-storm and then agree on a research proposal (basic framework) for submission to EU Horizon 2020 in

[Full story](#)

Max Snijder passed away



Max Snijder passed away on Friday, 27 April 2018. He served as secretary for the Management Board of the European Association for Biometrics since its foundation. Our thoughts are now with his family but in deep mourning we will continue his work.

[Full story](#)

Next events:

- September 24 – 25, 2018:** EAB Research Projects Conference (EAB-RPC) 2018
- September 25, 2018:** 8th EAB General Assembly
- September 26, 2018:** German TeleTrusT Biometrics Working Group
- September 26, 2018:** EAB Biometrics Research and Industry Awards 2018
- September 27 – 28, 2018:** BIOSIG 2018 – 17th International Conference of the Biometrics Special Interest Group
- November 9, 2018:** Seminar on Biometric Data and the GDPR
- November 23, 2018:** Norsk Biometri Forum Meeting

Special reports:

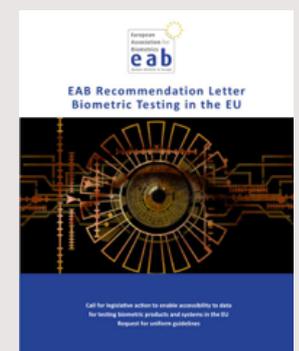
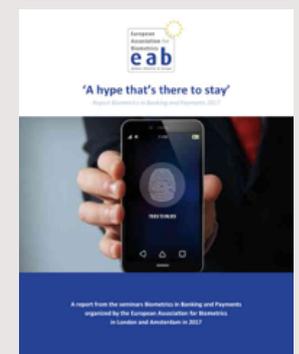
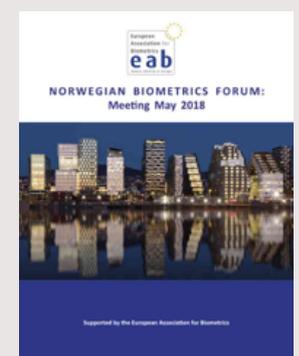
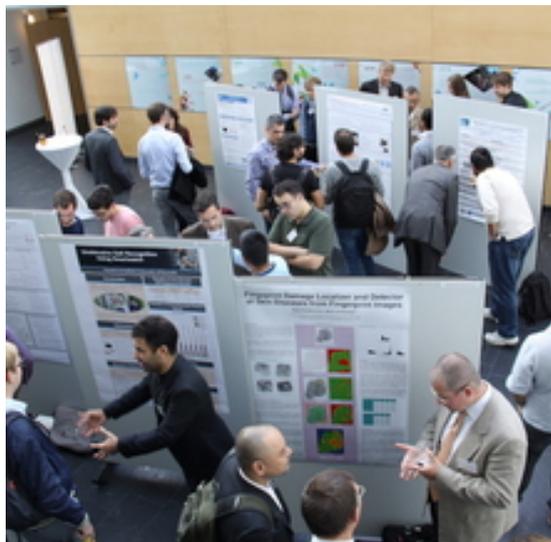


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BIOSIG 2018 – submission deadline extended

Call for Papers



The 17th International Conference of the Biometrics Special Interest Group (BIOSIG) will be held in Darmstadt, Germany, from September 26 – 28, 2018.

The extended final deadline for submissions is June 19th, 2018.

For more information visit:

<http://www.biosig.org/biosig-2018>

BIOSIG 2018 will provide a forum for computer scientists and engineers from around the world to present their latest research findings and share new ideas in biometrics technology. The conference's broad scope will include biometrics applications in areas like border control, national ID cards, e-banking, e-commerce, e-health etc. Research contributions on a broad range of biometrics modalities such as face, iris, fingerprint, veins, handwriting, gait and other modalities are welcome.

BIOSIG 2018 invites stakeholders and technical experts to submit original research papers. Industrial contributions presenting lessons learnt from practical usage, case study, recent results of prototypes, are also welcome. Submissions should be full papers (max. 8 pages) in English.

The topics of the conference include but are not limited to: Biometric standards and interoperability, multimodal and multi-biometrics (sensor, modality, sample, feature, score and decision fusion), security analysis of biometric components or systems, on-card comparison, presentation attack detection, aging of reference data, template protection, derivation of cryptographic keys from biometrics, de-identification, user interface design for biometric systems, biometric performance measurement, sample quality, best practices, usability, continuous authentication, forensics and other emerging applications, ethical, legal and socio-technological aspects, biometrics for public administrations.

Keynote speakers will be:

- Edgar Beugels (FRONTEX): "Implementation and operational Impact of Biometric Systems for Border Control"
- Patrick Grother (NIST): "FRVT 2018"
- Stephanie Schuckers (MSU): "Presentation Attack Detection"

Important Dates:

2018-06-19 Deadline for paper submissions

2018-07-20 Decision to authors

2018-08-20 Camera-ready

2018-09-26 Conference starts

Workshop on: Forming a strong EU-research consortium and proposal



Halmstad University, the Swedish Biometrics Forum, and the European Association of Biometrics are hosting a one-day workshop on 8th June near Copenhagen Airport during which we will brain-storm and then agree on a research proposal (basic framework) for submission to EU Horizon 2020 in the area of identification and security.

In the open announcements on the Societal Challenge on Secure Societies of Horizon 2020, we see a common thread on continuous multimodal biometric authentication, for example within and outside vehicles, but also in crowds of people in open areas. We believe there is considerable scope to develop our ideas in a direction which should fit well with these (or other) Calls, and we would like to invite you to be part of a converging strong research team.

During the workshop, we will sketch out a likely full consortium membership, and aim to agree on a set of tasks, roles, and a timetable for taking our planning forward. The workshop will be organized near the Copenhagen airport area, therefore enabling the possibility for you to take

an early morning and late evening flight to/from most major European airports.

Attendance is free, but registration is required. Please write Fernando Alonso-Fernandez (feralo@hh.se) or Josef Bigun (josef.bigun@hh.se) of Halmstad University (Sweden) for further information.

Max Snijder passed away



Max Snijder passed away on Friday, 27 April 2018. He served as secretary for the Management Board of the European Association for Biometrics since its foundation. Our thoughts are now with his family but in deep mourning we will continue his work.

Based on his operational experience (e.g. with the deployment of Biometrics at Schiphol) in early 2000, he was instrumental in establishing the European Biometrics community. After a career as entrepreneur in the not-for-profit sector Max became one of the pioneers of biometrics in the Netherlands. After several years of extensive experience with numerous biometric projects like Privium at Schiphol Airport, he founded the European Biometrics Group in 2004, a consulting firm focusing on biometrics technology and its application. He wrote numerous reports for instance for The Scientific Council for Government Policy (WRR) and several articles for magazines and newspapers.

Max, like no one else, knew how to convince the European Commission of important and useful projects in the field of biometrics. BioTesting Europe or BEST Network are examples of this. Their steadiness was very important to him.

Max Snijder was one of the co-founders of the European Association for Biometrics and served in the Management Board as its secretary from its very beginning in November 2011.

He devoted his energy to the purpose of bringing together the fragmented knowledge and experience in the field of biometrics. For Max it was important that the EAB is an organization open to representatives from many backgrounds like academia, governments, companies and not for profit organizations.

Max was a principled man regarding biometrics and security, he was worried about far-reaching technical control of society but stayed a realist.

Many people characterize Max as a friendly, independent, open person. Next to that, Max was a very talented musician, mastered a few instruments and played violin in the Bach Ensemble Amsterdam. Also, Max has played for many years in upper veterans field-hockey leagues in the Netherlands, his last year even in the top league.

In the last year the fight against a serious disease consumed all his energy – but he continued to work for EAB until very recently. We will miss Max very much. In deep mourning we will continue his work.

Alexander Nouak, Christoph Busch, Manus Fleskens, Farzin Deravi and Rasa Karbauskaite

EAB Banking Seminars 2018

London, Frankfurt, Amsterdam, Madrid



Where biometrics meets FinTech:

Join us for this years EAB Banking Seminars to debate one of the biggest questions facing FinTech and online services – "Do you REALLY know your customers?"

Seminars are attended by the financial sector and ID industry and will take place between September and December 2018 in Europe's financial capitals – London, Frankfurt, Amsterdam and Madrid. We will discuss the latest trends that are helping to improve customer ID security, such as blockchain, AI and smartphone biometrics; share best practice models; and assess the impact of new legislation, like GDPR. Entries are now open for biometrics and ID vendors to attend, share insights and demonstrate new product releases to a targeted audience from the financial sector.

Please contact the event chair, Michiel van der Veen, for more information.

Contact: Event chair:

Michiel van der Veen

email: banking_seminar@eab.org

Tel: +31 6 10392077

Biometrics Research in Serbia

Professors Miroslav Minović and Miloš Milovanović from University of Belgrade authored Blinking.id, a blockchain-based biometric authentication solution.

Major aim is to cure headaches of both businesses and end-users when it comes to the privacy and security of personal biometric user data.

All private individual data is stored on the network, allowing users to provide access to data per request and revoke access for various services. Blinking provides users with several authentication options – password, facial recognition, and fingerprint scanning.

Blinking is being developed in partnership with the GameCredits Inc, the Hyperledger foundation and IBM by using Hyperledger Fabric as a core framework. Fabric is a private, permissioned blockchain infrastructure, providing a modular architecture with a delineation of roles between the nodes, execution of Smart Contracts and configurable consensus and membership services.

EAB Research Projects Conference 2018



The 5th edition of the EAB Research Projects Conference will take place on 24 and 25 September 2018, at the premises of Fraunhofer IGD in Darmstadt, Germany.

The conference is organized by the European Association on Biometrics (EAB) in cooperation with the Joint Research Center (DG JRC) of the European Commission, through its Cyber and Digital Citizens' security Unit. The EAB-RPC 2018 will be co-located with the EAB Research Award and the IEEE BIOSIG Conference, later that same week. The conference is currently the largest event on research funded by the European Union in the area of Biometrics and Identity Management.

Over the previous four successful editions, EAB-RPC has become the main forum in Europe where attendees can simultaneously: promote research carried out in biometrics, forge new links and networks, and identify the appropriate partners for possible future project applications. Last year's edition welcomed over 100 participants from academia, industry and public

institutions.

Biometric Research in the Czech Republic

The research group STRaDe at the Faculty of Information Technology, Brno University of Technology has in the last academic year published numerous Bachelor- and Master-thesis.

The graduating students worked on various topics in biometrics specifically on research question related fingerprint damages (detection of skin disease, generation of synthetic damages), eye retina capture devices and recognition algorithms, connection of 2D and 3D face recognition, 3D hand geometry, and palmprint scanning from a distance.

- Electronic platform for acquirement of eye retina (non-mydratiac fundus camera)
- Detection and recognition of manifestations of diabetes on the eye retina
- Acquisition and recognition of 3D signature
- Generation of skin diseases into synthetic fingerprints from Anguli
- Methodology of fingerprint image quality measurement
- Analysis of local histograms in fingerprints
- Detection of people in room using low-cost thermal imaging camera
- Intelligent thermal camera with intruder detection
- Detection and location of guns in 2D scene

If you would like to get a copy of the published thesis please contact Prof. Martin Drahaný: <http://www.fit.vutbr.cz/~drahan>

State of Aadhaar Report 2017–2018

IDinsight has published recently its new state of Aadhaar report. Aadhaar provides identification to more than 1.2 billion Indian residents. Its scale, ability to uniquely identify individuals, and digital interface make it a compelling identification platform.

These same features also raise questions about privacy, data security, and exclusion. You can find an executive summary that provides an overview of the key findings of the State of Aadhaar Report 2017–2018 at:

<http://stateofaadhaar.in/wp-content/uploads/Executive-Summary-SOAR-2017-18.pdf>

The report itself aims to provide a holistic and empirically grounded assessment of the state of Aadhaar can be found at:

http://stateofaadhaar.in/wp-content/uploads/State-of-Aadhaar-Report_2017-18.pdf

Facebook joins FIDO Alliance board

The Fido (Fast IDentity Online) Alliance said Facebook was appointed to its board of directors

Facebook joins other large global technology, financial services and e-commerce board members in driving the alliance's strategic vision to reduce the world's reliance on passwords with stronger, simpler authentication. The alliance creates specifications for interoperable strong authentication with compliant mobile and web applications and PC platforms. Through its use of on-device public key cryptography and convenient authenticators such as security keys and biometrics, FIDO Authentication is more secure, private and easy to use than passwords and other forms of strong authentication.

The FIDO Alliance creates specifications for interoperable strong authentication with compliant mobile and web applications and PC platforms. Through its use of on-device public key cryptography and convenient authenticators such as security keys and biometrics, FIDO Authentication is more secure, private and easy to use than passwords and other forms of strong authentication.

While new to the board, Facebook played an active role in supporting the adoption of FIDO Authentication since January 2017 when they made it possible for any of their 2 billion daily users to use a FIDO-supported security key to log in. In addition to Facebook, many top service providers, such as Aetna, Google, PayPal, Samsung, Bank of America, NTT Docomo, Dropbox and Github, made FIDO Authentication available to their broad user bases.

Read more: <http://planetbiometrics.com/article-details/i/7128/desc/facebook-joins-fido-alliance-board/>

Available Funded Research Positions at the SOCIA-Lab

Available Funded Research Positions at the “SOCIA-Lab.: Soft Computing and Image Analysis Lab.” (University of Beira Interior, Portugal)

We are pleased to inform that the "SOCIA Lab. – Soft Computing and Image Analysis Group" at the University of Beira Interior (Portugal) is offering three research grant positions, in the scope of a research project entitled “*BIO-DI: Biometrics and Detection of Incidents in Urban Environments*”, funded by the "FEDER, Fundo de Coesão e Fundo Social Europeu" under the “PT2020 – Portugal 2020” program, “IT: Instituto de Telecomunicações” and “TOMI: City’s Best Friend”.

The research grants are given initially for 12 months, renewed for (at least) other 12 months. The net salary is of: 745€/month (\$884) for B.Sc./B.Eng. or 980€/month (\$1.163) for M.Sc./M.Eng.

Applications from graduated or Masters in Informatics, Computer Science, Electrical Engineering, Mathematics or related fields are accepted, preferably from researchers with expertise in the Computer Vision, Pattern Recognition, Image Processing and Biometrics domains. Solid programming skills in C++, MATLAB® and Python languages is also a requirement.

Applications from students interested in pursuing a Masters or Doctor degree in Portugal are privileged.

The research should be conducted at the University of Beira Interior, Covilhã, under the supervision of Prof. Hugo Proença (<http://di.ubi.pt/~hugomcp/investigacao.htm>).

In order to apply, please send a motivation letter and a short curriculum vitae to hugomcp@di.ubi.pt.

IEEE Transactions on Biometrics, Behavior, and Identity Science (T-BIOM)

IEEE Biometrics Council is pleased to announce IEEE T-BIOM!

The **IEEE Transactions on Biometrics, Behavior, and Identity Science (T-BIOM)** publishes original articles on all aspects of biometrics (i.e. recognizing people through their physiological or behavioral traits such as face, fingerprint, iris, and signature), including theory, applications, systems, and surveys. Biometrics are personal identity characteristics where people are recognized by who they are rather than by what they own; behavior is the typical movement of a person that is unique and identifiable; identity science underlies the application of biometrics.

Papers focusing on ramifications of these areas will also be welcomed, such as security of such systems, standards for their deployment, and new architectures and systems are also welcomed. Broad topics of interest include but are not limited to:

- Biometric modalities and their fusion
- Novel pattern classification and machine learning, including deep learning, algorithms for biometrics and identity science
- Behavior analysis related to biometrics and identity science
- Security of biometrics and identity systems
- Applications including forensics, healthcare, and law enforcement

More details and Call of Papers coming soon.

Apple patents infrared vein recognition system

Apple has been granted a patent for a vein recognition system using an infrared transmitter and receiver, which could be applied to a user's face

The U.S. Patent and Trademark Office issued the patent for "[Vein imaging using detection of pulsed radiation](#)" and published the application, which Apple originally filed on November 12, 2015.

Pulses of infrared light pass through the skin of the user, and are reflected by blood vessels within the examined area, according to the application. The reflected light is used to generate an image, which could be a 3D image if time-of-flight is used.

"Vein identification systems that are known in the art transmit infrared illumination through the user's hand, and capture a resulting image in which the veins within the hand appear as dark or bright lines due to variations in the captured infrared intensity," the application background says.

"Hand vein authentication is considered to have a high level of authentication accuracy due to the complexity of the vein patterns in the hand. Because the vein patterns are internal to the body, they are difficult to counterfeit. Furthermore, vein imaging is contactless and therefore alleviates hygienic concerns that are associated with common systems that use fingerprints or handprints."

Some of the patent illustrations depict the technology being used on a face, and it could be combined with FaceID to increase its ability to tell twins apart and detect mask-based biometric spoofs.

Apple Insider points out that the company files numerous patent applications, and frequently does not commercialize the ideas they describe. It also notes that by integrating new sensors, Apple could leverage the infrared capabilities of its TrueDepth camera array to implement vein recognition in a future product.

Read more: <https://www.biometricupdate.com/201805/apple-patents-infrared-vein-recognition-system>

Upcoming NIST Face Morph Evaluation

NIST is initiating a face morph detection evaluation under our current FRVT program

The FRVT MORPH track will provide ongoing, independent testing of prototype face morph detection technologies. The evaluation is designed to obtain an assessment on morph detection capability to inform developers and current and prospective end-users, and will evaluate two separate tasks: 1) Algorithmic capability to detect facial morphing in still photographs and 2) Face recognition algorithm resistance against morphing. Results and feedback will be provided back to participants on an ongoing basis as algorithms are tested.

The first draft of the FRVT MORPH Concept, Evaluation Plan, and API document is now available for public comment until June 7, 2018. For more information, please visit <https://www.nist.gov/programs-projects/face-recognition-vendor-test-frvt-morph>.

Please contact NIST if

1. You are a developer of morph detection algorithms and/or a developer of face recognition algorithms that are resistant to face morphing.
2. You represent an organization possessing suitable morph data that may be valuable to our effort.
3. You have suggestions toward developing the technology or a more general interest in shaping how NIST proceeds with the FRVT MORPH program.

Important Dates:

May 11 – June 7, 2018: API public commenting period

June 8, 2018: Final API published/Algorithm submission window opens

*Contact: frvt@nist.gov <<mailto:frvt@nist.gov>>

Technical Standards for Digital Identity Systems

World Bank Group issues a draft for discussion

The World Bank Group has issued recently a draft standard for Digital Identity Systems for discussion. According to the draft standards are critical for Identification systems to be robust, interoperable and sustainable.

You can read the full document at:

<http://pubdocs.worldbank.org/en/579151515518705630/ID4D-Technical-Standards-for-Digital-Identity.pdf>

Process standards, data standards and technical standards are the three types of standards for ensuring interoperability at the organizational, semantic and technical layers. The objective of the report is to identify the existing international technical standards and frameworks applicable across the identity life cycle. This catalogue of technical standards could serve as a source of reference for the stakeholders in the identification systems ecosystem.

NFIQ2.0 User Group Established

NFIQ 2.0 is a revision of the open source software NIST Finger Image Quality NFIQ. Recently a NFIQ2.0 user group was established, which met for the first time in April. The Ad-Hoc Group will deal with the exchange of experience for compilation and deployment of NFIQ2.0 and review and document the build process for all platforms (Windows, Android, Linux)

In 2004 NIST developed the first publicly available fingerprint quality assessment tool NFIQ. The major innovation of NFIQ was linking image quality to operational recognition performance. This had several immediate benefits; it allowed quality values to be tightly defined and then numerically calibrated. This, in turn, allowed for the standardization needed to support a worldwide deployment of fingerprint sensors with universally interpretable image qualities. Operationally, NFIQ has increased the reliability, accuracy, and interoperability of fingerprint recognition systems by identifying the samples that are likely to cause recognition failure.

Advances in fingerprint technology since 2004, necessitated the development of NFIQ2.0, which provides a higher resolution quality score (in range of 0-100 according to the international biometric sample quality standard ISO/IEC 29794-1:2016), lower computation complexity, as well as support for quality assessment in mobile platform. Furthermore, NFIQ2.0 is the basis for the new International Standard ISO/IEC 29794-4:2017 Biometric sample quality - Part 4: Finger image. NFIQ2.0 source code serves as the reference implementation of the standard and is available in GitHub at:

<https://github.com/usnistgov/NFIQ2>

Recently a NFIQ2.0 user group was established, which met for the first time in April. The Ad-Hoc Group will deal with the exchange of experience for compilation and deployment of NFIQ2.0 and review and document the build process for all platforms (Windows, Android, Linux). The next group telco will take place on June 18th, 2018. Interested NFIQ-users can contact the group chair: Ralph.Lessmann@CrossMatch.com

AMS acquired KeyLemon

AMS announced in February 2018 the acquisition of KeyLemon SA.

KeyLemon was a Swiss company in 2D and 3D face recognition that developed recently mobile solutions. AMS is a multinational semiconductor manufacturer and will leverage KeyLemon's IP to develop 3D face recognition solutions for smartphones, consumer devices and additional future applications.

KeyLemon was a spin-off of the Idiap Research Institute (www.idiap.ch) and more precisely of the Biometrics Security and Privacy group.

AMS <https://ams.com>

KeyLemon <https://www.keylemon.com>

in the news:

<https://www.startupticker.ch/en/news/february-2018/ams-about-to-acquire-keylemon>