



# EAB Newsletter

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This newsletter is issued by the European Association for Biometrics (EAB). Its content is contributed by the members of the EAB. If you feel an important news from your biometric sector or from your Region missing – do not hesitate to submit a news item to the secretariat before March 2015 for the next newsletter to be issued.

## CONTENT

<b>1. News from the EAB</b> .....	<b>4</b>
BITKOM and EAB have signed Cooperation Agreement.....	4
EAB now counts 161 Members, Numbers still growing! .....	4
EAB and IDIAP establish the European Cooperative Identification Technology Research Consortium (EAB-CITeR) .....	5
EAB General Assembly.....	6
<b>2. EU/EC/EP</b> .....	<b>7</b>
Biometrics Please! Automated Border Controls & Data Protection Obligations.....	7
New Initiative: Presentation Attack Detection Working Group (PADWG).....	7
EU Council of Ministers takes a Step away from total Harmonisation .....	8
The Magic Passport: on the Feasibility of enrolling double Identity Images.....	8
ABC Pilot at Rome Fiumicino Airport.....	10
<b>3. Outside Europe</b> .....	<b>11</b>
Beware – Biometrics are Coming to LA County – Without Public Notice.....	11
<b>4. Software &amp; Databases</b> .....	<b>12</b>
THIMBLE - Research Library for Analysis and Development of Biometric Template Protection .....	12
IRISSEG - A Groundtruth for Iris Segmentation .....	12
<b>5. Events</b> .....	<b>14</b>
International Workshop on Biometrics and Forensics – IWBF'15, Gjøvik, Norway 3-4 March, 2015.....	14
International Conference on Identity, Security and Behavior Analysis – ISBA'15, Hong Kong, 23-25 March, 2015.....	15
International Conference on Automatic Face and Gesture Recognition - FG'15, Ljubljana, Slovenia 4-8 May 2015.....	15
International Conference on Biometrics - ICB'15, Phuket, Thailand 20-24 May 2015.....	16
Special Session on Biometric Data Analysis at International Conference on Beyond Databases, Architectures and Structures - BDAS'15, Ustron, Poland 26-29 May 2015.....	16
IbPRIA 2015: 7th Iberian Conference on Pattern Recognition and Image Analysis, Santiago de Compostela, Spain 10-12 June 2015.....	16
19th Scandinavian Conference on Image Analysis - SCIA'15, Copenhagen, Denmark 15-17 June 2015.....	17
12th IAPR/IEEE Int.l Summer School for Advanced Studies on Biometrics for Secure Authentication Alghero, Italy June 22–26 2015.....	17
6 <sup>th</sup> International Conference on Imaging for Crime Prevention and Detection - ICDP'15, London, UK 15-17 July 2015.....	18
European Signal Processing Conference – EUSIPCO'15, Information Forensics and Security Track Nice, Cote d'Azur, France 31st August-4th September 2015 .....	19
European Biometrics Research and Industry Awards 2015: Presentation of finalists on September 9th.....	19
EAB Research Projects Conference - EAB-RPC'15, Darmstadt, Germany 7-8 September 2015.....	20
International Conference of the Biometrics Special Interest Group, Darmstadt, Germany 10-12 September 2015.....	20
7 <sup>th</sup> International Conference on Biometrics: Theory, Applications and Systems – BTAS'15, Washington, DC, USA 7-10 September 2015.....	21
<b>6. Reports</b> .....	<b>22</b>
IEEE Workshop on Biometric Measurements and Systems for Security and Medical Applications (BioMS), Rome October 17 <sup>th</sup> , 2014.....	22
EAB Banking Event in London, October 24 <sup>th</sup> , 2014.....	23
European Biometrics Workshop on Preserving Privacy in an Age of increased Surveillance in London, October 27 <sup>th</sup> 2014 .....	24

Norwegian Biometrics Forum Meeting in Oslo, November 27 <sup>th</sup> , 2014.....	25
German Biometric Working Group Meeting, December 16 <sup>th</sup> , 2014.....	25
<b>7. Impressum .....</b>	<b>26</b>

## 1. News from the EAB

### BITKOM and EAB have signed Cooperation Agreement

Over the last month the German Federal Association for Information Technology, Telecommunications and New Media (BITKOM) has communicated with EAB. In November discussions concluded and a cooperation agreement was signed. Following the spirit of the agreement the partners plan to hold joint events relating to the subject of biometrics.

The Germany based BITKOM association is the voice of the information technology, telecommunications and new media industry. BITKOM represents more than 2,200 companies, of which more than 1,400 are direct members. They include nearly all global players along with 1,000 powerful small and medium-sized enterprises and more than 200 start-ups. BITKOM members generate 140 billion euros in sales and export high-tech goods and services worth 50 billion euros. BITKOM thus represents approximately 90 per cent of the German information technology and communications market.

If you are interested in participating in the organizer team for a joint EAB-BITKOM event then please contact: <mailto:secretariat@eab.org>

### EAB now counts 161 Members, Numbers still growing!

The Board welcomes the following latest new members:

- Unico Software (Poland)
- Phonexia (Czech Republic)
- Blindata (UK)
- Mark Lockie (Science Media Partners, PlanetBiometrics.com, UK)
- Steria AS (Norway)
- Agnitio (Spain)
- Jenetric (Germany)
- Smart Sensors (UK)
- LionBridge Capital (USA)
- Center for Identification Technology Research (CITeR, USA)
- Perzona (USA)
- Intergated Biometrics (USA)

These 12 new members are coming from 7 different countries, including the USA.

## EAB and IDIAP establish the European Cooperative Identification Technology Research Consortium (EAB-CITeR)

On November 8th the EAB management board has approved the plan to establish the European Cooperative Identification Technology Research Consortium (EAB-CITeR). The intention of this plan is to elevate on a European level the initiative of the Idiap Research Institute to create a cooperative research consortium, which is driven and managed by the Swiss Center for Biometrics Research and Testing ( [www.biometrics-center.ch](http://www.biometrics-center.ch) ). In the process to establish EAB-CITeR, the resources of IDIAP and the critical mass of over 160 current EAB members shall complement each other. The EAB-CITeR is established after the model of the US based Center for Identification Technology Research (US-CITeR). The EAB-CITeR and the US-CITeR are seeking close cooperation while remaining independent consortia.



The kick-off for the EAB-CITeR was initiated by Sebastien Marcel (IDIAP), who invited the European research community for a two-day meeting in Martigny on November 12./13. 2014. The purpose of the EAB-CITeR shall be that Partners in the Consortium will conduct research funded cooperatively by Affiliates and will generate Results for the benefit of Europe. The EAB-CITeR shall maintain a

mechanism whereby the environment of registered EAB-CITeR "Institutional Members" can be used to carry out high quality research, to train talented engineers and researchers and to foster technology transfer from academia to the industry.

The Kick-Off Workshop hosted by the Swiss Center for Biometrics Research and Testing presented two instruments: a cooperative research environment (EAB-CITeR) and the BEAT platform ([www.beat-eu.org/platform](http://www.beat-eu.org/platform)). More than 50 persons attended the Kick-off Workshop including research institutions, companies and organisations that expressed their strong interest in these instruments. As a consequence, EAB and the IDIAP Research Institute decided to elevate at a more European level the cooperative research instrument towards the establishment of EAB-CITeR.

The inauguration of the EAB-CITeR is scheduled to take place during the EAB-symposium in London on February 25th, 2015. See:



Read more: <http://eab.org/events/program/86>

## EAB General Assembly

On 25 February 2015 the 4th General Assembly will take place. This time the GA is scheduled after the Symposium, and all takes place on a single day. The location is National Physical Laboratory (NPL) in London. The details on the location will follow soon. The schedule of the day is as follows:

- 10.00 – 17.00 European Biometrics Symposium
- 17.00 – 18.30 Informal diner
- 18.30 – 20.30 EAB General Assembly (EAB members only)

The agenda for the GA will be sent to all EAB members shortly.

The next day, on 26 February, the Biometrics Working Group (BWG) will have their meeting. Some of the presenters will be exchanged and the participants of the BWG will be invited to attend the Symposium.

## 2. EU/EC/EP

### Biometrics Please! Automated Border Controls & Data Protection Obligations

Diana Dimitrova, a legal researcher at ICRI/CIR, KU Leuven, focuses on privacy, data protection, and border control in the framework of the FastPass project. She argues that the automation of border control in the EU increases the data protection obligations of the respective authorities and necessitates legislative changes.

Considering that ABC has implications for border agencies as controllers of personal data that is automatically processed, the processes should be compatible with the applicable data protection framework. Therefore, I propose some recommendations for ABC derived from Art. 8 European Convention of Human Rights (ECHR), Art. 7 and 8 Charter of Fundamental Rights of the EU (CFREU), Directive 95/46/EC on data protection, as well as the case-law of the Strasbourg and Luxembourg Courts.

As with the collection of any personal data, ABC should pursue a legitimate aim. It is argued that ABC is needed to speed up border control and reduce queues. Effective border management could be a legitimate goal for ABC. Still, the means to achieve it have to be (1) based in a law which is sufficiently precise to prevent against arbitrary (mis)use of the data; (2) necessary to achieve the aim, i.e. adequate to achieving the aim, not simply contributing towards it; and (3) proportionate, i.e. the least intrusive means of achieving the goal. This means that if there are other means to achieve effective border management, which entail fewer risks for passengers, these should be preferred. The purpose is to balance the risks for passengers against the benefits of the system.

*Read more:*

<http://blogs.lse.ac.uk/mediapolicyproject/2014/07/21/biometrics-please-automated-border-controls-data-protection-obligations/>

### New Initiative: Presentation Attack Detection Working Group (PADWG)

Creation of new working group devoted to presentation attack detection in biometrics was initially discussed during the last EAB member meeting on November 17, 2014. The primary aim of the group is to identify challenges related to the PAD and work out common resolutions across the team of international experts. The first activity of this new group will be devoted to PAD-related standard development carried out in ISO/IEC JTC1/SC37. The group will organize cyclic meetings (mostly employing teleconference tools for time and cost optimization) devoted to challenging topics that still need to be discussed after SC37 meeting. This should particularly help National Bodies in development of comments offered for the next SC37 cycle and speed up standard development.

Further plan for the group activities is to serve the industry, evaluation labs and academia in finding viable solutions related to the PAD, especially related to the evaluation of biometric sensor security.

Your suggestions and active participation are more than welcome. Please contact Dr. Adam Czajka of Warsaw University of Technology (<mailto:aczajka@elka.pw.edu.pl>) for further details.

## EU Council of Ministers takes a Step away from total Harmonisation

At the EU Council of Ministers Home and Justice Affairs meeting 4 December in Brussels, the ministers agreed a partial general approach on data processing in the public sector. This proposal by the Council would allow for some flexibility for the Member States' public sector which should be allowed to maintain or introduce national provisions to further specify how the Regulation's rules would be applied.

The Ministers have not reached full agreement on the One Stop Shop. The Presidency proposes a model which would enhance "proximity"; the One Stop Shop mechanism should only intervene in important cross-border cases. Processing situations affecting only one Member State or persons in only one Member State should continue being dealt with by the local DPA.

The Council's press office states that the majority of ministers endorsed the general architecture of the proposal and the Presidency concluded that further technical work will need to be done in the coming months. Andrea Orlando, Italy's Minister for Justice and President of the Council, said: "Today we have agreed on two of the most politically sensitive issues on data protection reform. We see this as an important result for the Presidency, and a decisive step towards achieving global agreement on this complex and important file". However, as always, the Council states that 'nothing is agreed until everything is agreed.'

PL&B has organised a Roundtable on the progress of the EU Data Protection draft Regulation under Italy's Presidency in London on 11 December. The event is now full. To be included on the waiting list, please contact [glenn@privacylaws.com](mailto:glenn@privacylaws.com).

## The Magic Passport: on the Feasibility of enrolling double Identity Images

Last November, at the Frontex Research Workshop on Vulnerabilities and Countermeasures in First Line Border Checks, the University of Bologna (Department of Computer Science and Engineering (DISI), University of Bologna) presented a study on the feasibility of an attack to ABC systems performed by using morphed face images obtained by combining faces of different subjects [1]. This study was carried out within the Fidelity project (<http://www.fidelity-project.eu/>) and is motivated by the fact that several countries (e.g., Italy) allow the citizens applying for an electronic passport to provide a printed face photo which is not therefore acquired live during the document issuing process. This possibility implies the risk that the image provided is somehow altered with important effects on the subsequent face recognition

task, especially when performed automatically at ABC systems. Many reasons could lead to an alteration of the face image: some unintentional distortions could be introduced by the printing or acquisition devices (e.g. barrel effects), but people could also decide to intentionally alter the face image just to look more attractive (e.g. using digital beautification tools) or with some kind of criminal intent.

The scenario hypothesized in this work is the following. A subject with no criminal records could apply for an eMRTD by presenting a morphed face photo; if the image is not noticeably different from the applicant face, the police officer could accept the photo and release a perfectly regular document. If a morphed image included in an eMRTD can be successfully matched with the face of two or more subjects, then different persons can share the same regular document.

Several experiments have been conducted to evaluate if:

- It is possible to create high quality morphed face images from photos of two different subjects;
- The morphed images are able to deceive a human expert;
- Commercial face recognition SDKs successfully match the morphed image with both subjects.

The morphed images have been created starting from a public face database and generated using a free software (GIMP) which includes a plugin for face morphing. The experiments have been carried out as follows:

- Two images of different subjects (not matching) were selected;
- The two images were morphed into a new image;
- The morphed image was matched to other two images of the two subjects and the matching result was analyzed.

The experiments have been conducted using two commercial face recognition software tools and all the attacks carried out were successful: for both SDKs the matching score between the morphed face image and each of the test images is higher than the recommended threshold (for a system working at a FAR of 0.1%).

As an outcome of this study, we can affirm that giving to the citizens the possibility of providing a printed face photo poses serious concerns in terms of security. The morphed images obtained are visually very similar to one of the two subjects and suggest that even a human expert could be easily fooled. At today the best solution to the problem of altered face photo is to directly acquire the face photo to be stored in the ePassport at the enrolment station using a high quality camera in a controlled environment.

In order to assess the human capabilities in detecting morphed images we setup an online test. If you want to participate in this challenge and evaluate your own ability try: <http://www.eSurveysPro.com/Survey.aspx?id=09d52aa4-1d7f-4d53-9ed1-8b75de2cf189>

[1] M. Ferrara, A. Franco and D. Maltoni, "The Magic Passport", in proceedings International Joint Conference on Biometrics (IJCB), 2014.

## ABC Pilot at Rome Fiumicino Airport



Since the end of July at the airport of Rome-Fiumicino is active the experimental project "e-gates", for automated control of e-passport. Eight automatic gates are located at Terminal 3, four in the departure area and four in the arrival area, to speed controls maintaining the security of the manual document control.

The experimental system is the result of close cooperation between Airports of Rome (AdR) and the Ministry of the Interior - Central Directorate for Immigration and Border Police. The gates, connected to the information system of border police, are intended for EU citizens over 18 years of age crossing Schengen area, holding electronic passport. The installation is a trial with SITA and more than 3,000 passengers a day are using the eGates.



Italian citizens, holding second-generation e-passport, can also use fingerprints for identification if facial recognition fails. This feature will be extended to citizens of other EU member states once certificates for reading passport fingerprints will be available.

Official AdR Video: <https://www.youtube.com/watch?v=NTTqJ2OYXTg>

Photo-gallery:

[http://www.corriere.it/foto-gallery/tecnologia/provati-per-voi/14\\_novembre\\_03/gate-roma-9dfede8c-636d-11e4-bb4b-8f3ba36eaccf.shtml#](http://www.corriere.it/foto-gallery/tecnologia/provati-per-voi/14_novembre_03/gate-roma-9dfede8c-636d-11e4-bb4b-8f3ba36eaccf.shtml#)

### 3. Outside Europe

#### **Beware – Biometrics are Coming to LA County – Without Public Notice**

Without notice to the public, Los Angeles County law enforcement officials are preparing to widen what personal information they collect from on people they encounter by building a massive database of iris scans, fingerprints, mug shots, palm prints and, potentially, voice recordings.

The new database of personal information, dubbed a multimodal biometric identification system, would augment the county's existing database of fingerprint records and create the largest law enforcement repository outside of the FBI of so-called next-generation biometric identification, according to county sheriff's department documents.

On Sept. 15, the FBI announced that the Next Generation Identification System was fully operational. Now that the central infrastructure is in place, the next phase is for local jurisdictions across the country to update their own information-gathering systems to the FBI's standards.

*Read more:*

<http://biometricblog.net/beware-biometrics-are-coming-to-la-county-without-public-notice/>

## 4. Software & Databases

### THIMBLE - Research Library for Analysis and Development of Biometric Template Protection

Description: THIMBLE is a portable C++ library providing data structures and functions being useful for programmers and biometric researchers to analyze and design biometric template protection. The focus of the library is set to, but is not restricted to, the fingerprint modality and provides tools for protection via fuzzy vault. The library also features lower-level functionalities being provided with the intention of being useful for analyses and development of biometric template protection. These include

- finite fields
- polynomials
- secure hash algorithm (SHA)
- advanced encryption standard (AES)
- binary matrices/vectors
- multi-precision integers
- Reed-Solomon/Guruswami-Sudan decoder
- BCH codes

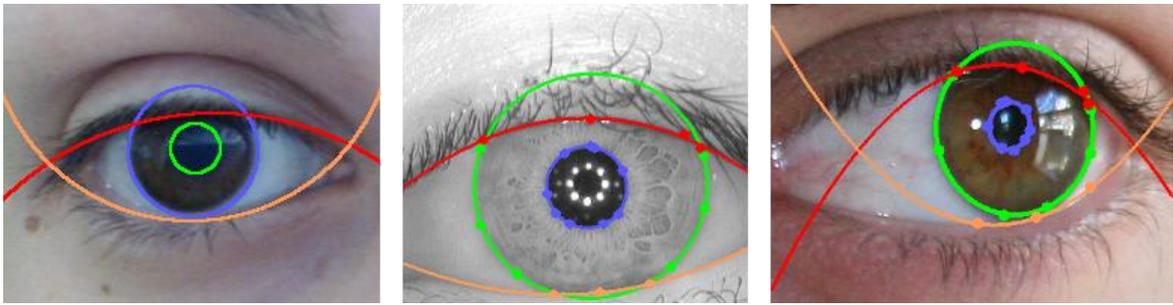
Copyright: The library THIMBLE is open-source and licensed under the terms of the LGPL. It has been written and is maintained by Benjamin Tams from the University of Goettingen.

Download: <http://www.stochastik.math.uni-goettingen.de/biometrics/thimble>

### IRISSEG - A Groundtruth for Iris Segmentation

Iris segmentation is at the core of a biometrics system. If following Daugman's approach it is the first step and the basis for feature extraction. It can be argued that a better segmentation will lead to better results over the whole biometric toolchain. As such, improving the iris segmentation is a desirable objective.

The problem lies in the fact that it is hard to evaluate the segmentation separately. Either the segmentation is controlled manually or by the result of the whole biometric system. The first is time consuming and tedious and the second is heavily influenced by feature extraction and comparator. In order to evaluate the iris segmentation in an isolated fashion a ground truth is required.



At the University of Salzburg and the Halmstad University researchers generated a database of iris segmentation groundtruth (IRISSEG) based on widely known and frequently used iris image databases. The ground truth was generated manually by a total of three operators. Two separate datasets were generated based on different shapes used in the segmentation. The IRISSEG-CC dataset contains parameters which define circular iris and eyelid maskings for the BioSec Multimodal Biometric, Casia Iris v3 Interval and MobBIO Databases. The IRISSEG-EP dataset contains parameters which define elliptical iris and polynomial eyelid masks for the Casia Iris v4 Interval, IIT Delhi, Notre Dame IRIS-0405 and UBIRIS v2 Iris databases.

The CC database is available from the Halmstad University ISLAB page [1] and the EP database is available from the University of Salzburg WAVELAB page [2]. In addition to the database a paper [3] was published which includes a methodology for the evaluation of iris segmentation algorithms based on the groundtruth. The database and methodology finally allows for a separate optimization of iris segmentation as well as the fast detection of iris images for which the segmentation algorithm fails to perform.

[1] [http://islab.hh.se/mediawiki/index.php/Iris\\_Segmentation\\_Groundtruth](http://islab.hh.se/mediawiki/index.php/Iris_Segmentation_Groundtruth)

[2] <http://www.wavelab.at/sources/Hofbauer14b/>

[3] Heinz Hofbauer, Fernando Alonso-Fernandez, Peter Wild, Josef Bigun, Andreas Uhl, "A Ground Truth for Iris Segmentation", In Proceedings of the 22th International Conference on Pattern Recognition (ICPR'14), Stockholm, Sweden, August 24 - 28, 2014.

## 5. Events

### International Workshop on Biometrics and Forensics – IWBF'15, Gjøvik, Norway 3-4 March, 2015

The registration for IWBF-2015 is now open at:

[https://www.deltager.no/iwbf-2015\\_10032015](https://www.deltager.no/iwbf-2015_10032015)

The 3rd International Workshop on Biometrics and Forensics (IWBF) will take place on 3-4 March, 2015. The workshop will be hosted by the Norwegian Biometrics Laboratory in Gjøvik, Norway. This international workshop is organized by COST Action IC1106 (Integrating Biometrics and Forensics for the Digital Age). It is an international forum devoted specifically to the development of synergies between the biometrics and forensic science research areas. IWBF provides the meeting place for those concerned with the usage of biometric recognition systems in forensic science applications, attracting participants from industry, research, academia and users. This workshop will include research in the following areas: - Biometric evidence for forensic evaluation and investigation - Audiovisual biometrics for multimedia forensics - Soft biometrics for forensics examination - Forensic behavioral biometrics - Biometric analysis of crime scene traces and their forensic interpretation - Combination of multimodal biometrics with other forensic evidence - Ethical and societal implications of emerging forensics biometrics. The workshop will include keynote presentations from:

- Antonio Farello (INTERPOL): Using biometrics in fighting international crime
- Els Kindt (KUL): Use of biometric data for forensics: great promises, great legal pitfalls?
- Katrin Franke (GUC): Computational Forensics: Techniques, Applications and Challenges in the Computer-based Analysis of Handwritten Signatures and Questioned Documents

Furthermore the IWBF Program Committee has reviewed numerous submissions that were submitted for the workshop. The best submission are selected for oral presentation. You can find more information about IWBF 2015 and the detailed agenda at:

<https://sites.google.com/site/iwbf2015>

## **International Conference on Identity, Security and Behavior Analysis – ISBA'15, Hong Kong, 23-25 March, 2015**

The IEEE International Conference on Identity, Security and Behavior Analysis (ISBA 2015) is a unique conference series initiated by the IEEE Biometrics Council and its first edition will be held in Hong Kong. This conference is intended to meet the emerging need for a winter meeting, especially for the Asian participants where the introduction of large scale biometrics programs have attracted significant increase in research and development efforts. It will be a forum that brings together experts in biometrics, security, and human behavior to consider research issues and solutions that are robust, comprehensive, and broader than currently considered in each of these individual research areas. Success of emerging biometrics technologies also depends on human aspects of biometrics-driven security and balancing high security with the user friendliness. Therefore this conference serves to provide a new form for such broad areas defining human side of security and user behavior as well as social influence in the biometrics security.

ISBA 2015 is intended to have a broad scope, including advances in fundamental biometrics security, new algorithms and/or technologies for biometrics, user-centric security and privacy, balancing user friendliness and high security, and human aspects of biometrics-driven security. Areas of coverage include biometrics based on voice, fingerprint, iris, face, handwriting, gait and other modalities, economics of biometrics security for enduser, security policies and user behavior well as social influence in biometrics security and privacy decisions.

*Read more:* <http://www.isba2015.org/>

## **International Conference on Automatic Face and Gesture Recognition - FG'15, Ljubljana, Slovenia 4-8 May 2015**

The 11th IEEE International Conference on Automatic Face and Gesture recognition, IEEE FG 2015, will be held in Ljubljana, Slovenia on May 4-8, 2015. IEEE FG 2015 is the premier international forum for research in image and video-based face, gesture, and body movement recognition. It presents research that advances the state-of-the-art in these and related areas, leading to new capabilities in various application domains. The conference will feature a comprehensive scientific program as well as industry exhibitions and demonstrations of the most recent technological achievements from academia. The paper submission deadline is September 30, 2014.

If you want to become an exhibitor or conference sponsor or learn more about the opportunities for organizers: workshops, tutorials, special sessions, panels:

*Read more:* <http://www.fg2015.org/>

## **International Conference on Biometrics - ICB'15, Phuket, Thailand 20-24 May 2015**

The 8<sup>th</sup> IAPR International Conference on Biometrics (ICB 2015) is planned to be hosted in Thailand from May 20<sup>th</sup> to 22<sup>nd</sup> , 2015. ICB is an official conference of the IAPR Technical Committee on Biometrics (TC4) and is also co-sponsored by IEEE Biometrics Council.

For 2015, ICB will be held at Phuket, Thailand. It will have oral sessions, posters, tutorials, demonstrations, competitions and a government track to coincide with the beginning of ASEAN Economic Community 2015 (AEC2015).

The conference will have a broad scope and invites papers that advance biometric technologies, sensor design, feature extraction and matching algorithms, analysis of security and privacy, and evaluation of social impact of biometrics technology. Topics of interest include all areas of current Biometrics research and applications.

*Read more:* <http://icb2015.org/>

## **Special Session on Biometric Data Analysis at International Conference on Beyond Databases, Architectures and Structures - BDAS'15, Ustron, Poland 26-29 May 2015**

Beyond Databases, Architectures and Structures (BDAS) is a series of conferences that intends to give the state-of-the-art of the research that satisfies the needs of modern, widely understood database systems, architectures, models, structures, and algorithms focused on processing various types of data. The aim of the conference is to reflect the most recent developments of databases and allied techniques used for solving problems in a variety of areas related to database systems, or even go one step forward - beyond the horizon of existing databases, architectures and data structures.

The 11th BDAS Conference (technically co-sponsored by IEEE) is a continuation of the highly successful BDAS conference series started in 2005, traditionally held in Ustron, Poland (transfer will be provided from/to Krakow).

*Read more:* <http://bdas.polsl.pl/>

## **IbPRIA 2015: 7th Iberian Conference on Pattern Recognition and Image Analysis, Santiago de Compostela, Spain 10-12 June 2015**

IbPRIA is an international conference co-organized by the Spanish AERFAI and Portuguese APRP chapters of the IAPR International Association for Pattern Recognition.

IbPRIA is a single track conference consisting of high quality, previously unpublished papers, presented either orally or as a poster, intended to act as a forum for research groups, engineers and practitioners to present recent results, algorithmic improvements and promising future directions in pattern recognition and image analysis.

Read more: <http://www.ibpria.org/2015/>

## **19th Scandinavian Conference on Image Analysis - SCIA'15, Copenhagen, Denmark 15 -17 June 2015**

The 19th conference in the long tradition of Scandinavian Conferences on Image Analysis will take place in Copenhagen, Denmark. The conference invites paper submissions presenting original high quality work within the following topics: 3D vision, Medical and biomedical image analysis, Color and multispectral image analysis, Computational imaging and graphics, Faces and gestures, Feature extraction and segmentation, Human-centered computing, Matching, registration and alignment, Motion analysis, Object and scene recognition, Pattern recognition and machine learning, Robot vision, Vision systems and applications, Video and multimedia analysis.

Read more: <http://www.scia2015.org>

## **12th IAPR/IEEE Int.I Summer School for Advanced Studies on Biometrics for Secure Authentication Alghero, Italy June 22–26 2015**

For the last twelve years, the International Summer School on Biometrics has been closely following the developments in science and technology to offer a cutting edge, intensive training course, always in-line with the current state-of-the-art.

What are the most up-to-date core biometric technologies developed in the field? What is the potential impact of biometrics in forensic investigation and crime prevention? How can biometrics cope with mobile applications? What are the most relevant issues in biometric standardization? What can we learn from human perception? What does it involve to integrate a biometric recognition system?

This school follows the successful track of the International Summer Schools on Biometrics held since 2003. In this 12th edition, the courses will mainly focus on new and emerging issues:

- How Biometrics will cope with the demand for mobile applications;
- How to exploit new biometric technologies in forensic and security applications;
- Standardization, evaluation and assessment of biometric applications.
- Biometrics technologies and advanced research: What is next?

The courses will provide a clear and in-depth picture on the state-of-the-art in biometric verification/identification technology, both under the theoretical and scientific point of view as well as in diverse application domains. The lectures will be given by 18 outstanding experts in the field, from both academia and industry. An advanced feature of this summer school will be some practical sessions to better understand, "hands on", the real potential of today's biometric technologies.

The school will be open to about 50 highly qualified, motivated and pre-selected applicants. Phd students, post-docs, researchers, police officers and professionals are encouraged to apply.

Send a filled application form (download from <http://biometrics.uniss.it>) together with a short curriculum vitae to: Prof. Massimo Tistarelli – e-mail: [biometricssummerschool@gmail.com](mailto:biometricssummerschool@gmail.com)

Advance pre-registration is strictly required by all applicants by February 15th 2015.

Contact: [tista@uniss.it](mailto:tista@uniss.it)

## **6<sup>th</sup> International Conference on Imaging for Crime Prevention and Detection - ICDP'15, London, UK 15-17 July 2015**

This conference follows the successful IDSS (Intelligent Distributed Surveillance Systems) events held in 2003 and 2004 and ICDP 2005, 2006, 2009, 2011 and 2013, to bring together researchers, industry, end-users, law-enforcing agencies and citizens groups to share experiences and explore areas where additional research, development and better working practices are needed, identify possible collaboration and consider the societal impact of such technologies.

The 6th International Conference on Imaging for Crime Detection and Prevention (ICDP-15) aims to create an important networking forum in which participants can discuss the present and future of image-based technologies for crime detection and prevention.

ICDP (and its predecessor IDSS) has traditionally been a special meeting point of different disciplines (computer science, social science, engineering, management, etc.) and an opportunity for a wide range of stakeholders to discuss the many different aspects of the application of imaging technologies in this socially crucial domain.

*Read more:* <http://www.icdp-conf.org/>

## European Signal Processing Conference – EUSIPCO'15, Information Forensics and Security Track Nice, Cote d' Azur, France 31st August-4th September 2015

EUSIPCO is the flagship conference of the European Association for Signal Processing (EURASIP). The 23rd edition will be held in Nice, on the French Riviera, from 31st August -4th September 2015. EUSIPCO 2015 will feature world-class speakers, oral and poster sessions, keynotes, exhibitions, demonstrations and tutorials and is expected to attract in the order of 600 leading researchers and industry figures from all over the world.

The Information Forensics and Security Track addresses all works whereby security is achieved through a combination of techniques from cryptography, computer security, machine learning and multimedia signal processing.

Read more: <http://www.eusipco2015.org>

## European Biometrics Research and Industry Awards 2015: Presentation of finalists on September 9th

The European Association for Biometrics (EAB) has launched the ninth European Biometrics Research and Industry Awards. These prestigious awards are granted annually to individuals who have been judged by a panel of internationally respected experts to be making a significant contribution to the field of biometrics research and innovation in Europe.

The award is stimulating innovation in academic research as well as in industry. Thus biometric experts with either of the following profiles should submit their work. Academic researchers enrolled in the last or penultimate year of a Ph.D. program or who have obtained a Ph.D., with major focus on biometrics, from a European academic institution no later than two years before the given deadline, might consider applying for the awards. Further industrial researchers employed by European companies whose core business is biometrics might consider applying for the industry award, which will be granted to the candidate that has created the strongest impact for industry.

Applicants are invited to submit a research paper and supporting information by 15<sup>th</sup> of May, 2015. These papers will be reviewed by a jury composed of internationally recognized experts in the field of biometrics who will judge the academic and scientific quality for the EAB academic research award and the novelty, impact, applicability and other business aspects for the EAB industry award. The finalist will present their work to all EAB members on September 9<sup>th</sup> in Darmstadt.

Read more: <http://www.eab.org/award/cfp.html> Contact: [patrizio.campisi@uniroma3.it](mailto:patrizio.campisi@uniroma3.it)

## EAB Research Projects Conference - EAB-RPC'15, Darmstadt, Germany 7-8 September 2015

The EAB and the EU FP7 projects FIDELITY, FastPass, BEAT, FutureID and INGRESS organized jointly the first Research Project Conference (EAB-RPC) last September. The conference was meeting large interest in the community. Immediately after the meeting the preparations for a follow-up conference have started. The second edition of EAB-RPC will take place on September 7-8, 2015. The conference will be hosted by Fraunhofer-IGD, Darmstadt-Germany.

The EAB-Research Project Conference 2015 will be co-located with the EAB research award and the IEEE BIOSIG conference that will take place later that same week.

The program will be composed by update reports from project that have already participated in the previous year. Moreover new projects that started in the meantime will be presented extensively in a dedicated session. If you are interested to participate with your consortium in this joint dissemination event then please contact the organizers Christoph Busch ([christoph.busch@hig.no](mailto:christoph.busch@hig.no)) and Alexander Nouak ([Alexander.Nouak@eab.org](mailto:Alexander.Nouak@eab.org))

Read more: <http://www.eab.org/events/program/79>

## International Conference of the Biometrics Special Interest Group, Darmstadt, Germany 10-12 September 2015

The 14th edition of the BIOSIG conference is now being announced and the call for papers is published at: <http://www.biosig.de/biosig2015>

The BIOSIG 2015 conference addresses topics regarding biometric systems and algorithms but also considers security and privacy of biometric recognition methods. The relevant techniques in the area of presentation attack detection (liveness detection) and template protection are about to supplement biometric systems, in order to improve fake resistance, prevent potential attacks such as crossmatching, identity theft etc.

The conference is jointly organized by the Competence Center for Applied Security Technology (CAST), the German Federal Office for Information Security (BSI), the European Association for Biometrics (EAB), the ICT COST Action IC1106, the Joint Research Centre of the European Commission (JRC), the TeleTrusT-Association, the Norwegian Biometrics Laboratory (NBL), the Center for Advanced Security Research Darmstadt (CASED), the Fraunhofer Institute for Computer Graphics Research IGD and the special interest group BIOSIG of the Gesellschaft für Informatik e.V. (GI).

Submission deadline for contributions to BIOSIG 2015 is May 15th , 2015

## 7<sup>th</sup> International Conference on Biometrics: Theory, Applications and Systems – BTAS'15, Washington, DC, USA 7-10 September 2015

The IEEE Seventh International Conference on Biometrics: Theory, Applications and Systems (BTAS 2015), a continuation of the highly successful BTAS conference series started in 2007, will be held in the September 7 - 10, 2015 time period in the Washington, DC area. BTAS 2015 is a premier research conference focused on all aspects of biometrics. It is intended to have a broad scope, including advances in fundamental signal processing, image processing, pattern recognition, and statistical and mathematical techniques relevant to biometrics.

Areas of coverage include biometrics based on voice, fingerprint, iris, periocular, face, handwriting, gait and other modalities, as well as multi-modal biometrics and new biometrics based on novel sensing technologies. Submissions will be rigorously reviewed, and should clearly make the case for a documented improvement over existing state-of-art. Experimental results for contributions in established areas such as voice, face, iris, fingerprint, and gait are encouraged to use the largest and most challenging existing publicly available datasets.

*Read more:* <http://btas2015.org/>

## 6. Reports

### IEEE Workshop on Biometric Measurements and Systems for Security and Medical Applications (BioMS), Rome October 17<sup>th</sup>, 2014

The 5th edition of the IEEE Workshop on Biometric Measurements and Systems for Security and Medical Applications (BIOMS 2014) took place at the Roma Tre University in Rome, Italy, on October 17th, 2014. The event was sponsored by the IEEE Italy Section, and Supported and promoted by the IEEE Italy Section Biometrics Council Chapter. The general chairs of the event were prof. Patrizio Campisi from Roma Tre University and prof. Vincenzo Piuri from the University of Milan, Italy.



The workshop received 24 submissions, of which 15 were accepted for presentation (62.5% acceptance rate). Each paper was peer-reviewed by 3 to 5 members of the scientific committee. The accepted contributions were mainly coming from European institutions, and articles from Brazilian, Australian and Mexican institution were also presented.

The workshop was organized into five sessions during the day: the first session was dedicated to face, ear and iris biometrics, while the second covered ECG and voice biometrics. Being one of the main topic of the workshop, the papers of the third session dedicated specific attention to medical aspects to be considered in biometric recognition systems. The last two sessions were focused on hand biometrics, with articles covering recognition systems based on fingerprint, palm, and finger vein patterns.

In more detail, significant innovative contributions were presented for the recognition of infant babies, with two papers focusing on ear and ballprints biometrics. Among the most emerging biometric modalities, electrocardiogram (ECG) was notably considered with two contributions.



Interesting and stimulating discussions were developed during all the performed sessions.

More information on BioMS 2014 can be found at: <http://bioms2014.di.unimi.it/>

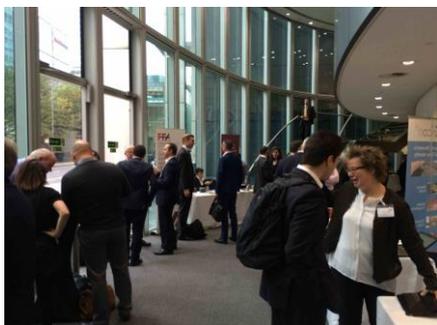
## EAB Banking Event in London, October 24th, 2014

In May 2014 the Association of the German Banks (BdB) and the EAB jointly organized an event that was devoted to the Financial Services community and at which numerous EAB members participated – see the respective report in the July edition of this newsletter. Based on the positive feedback that we received, a follow-up workshop took place on October 24th at Citibank premises in London - this time with more than 100 participants. The event was jointly organized by Max Snijder and Farzin Deravi (EAB) in close cooperation with Ali Imanat and Alexa Harding (Financial Fraud Action UK).



*From left to right: Max Snijder, Ali Imanat and Farzin Deravi*

This second edition of the EAB banking event looked at the regulatory requirements such as the European Payment Services Directive (EPSD<sub>2</sub>), which was discussed by Anoosha Livani (Citibank), and the business cases that stimulate developments in secure mobile banking and financial transactions. A highlight of the day was the clear statements in favor of biometrics in payment protocols that were provided by Richard Martin (Visa Europe).



End users reports shared their experiences from a business perspective, touching on important aspects such as process flows, added value and fraud reduction.

The seminar concluded with an interesting panel discussion. It was agreed that the iTouch of the iPhone 5S is not a just hype. It has put some major developments in movement at the banks and credit card companies. The keyword is flexibility towards authentication attributes, such as biometrics. However, this flexibility can only be achieved if standards are generally met and costs are reduced.

The event was augmented with a sponsor's exhibition in which direct contact of the participating EAB members with the more than 50 participants from many European banks was stimulated. Overall representatives of the following banks attended the event: ABN AMRO Bank, Anglicity Ltd, Bank of Ireland, Bankenverband, Barclaycard, Barclays, Boursorama Banque, C Hoare & Co, CaixaBank, Capital One, Cecabank, Citibank, Co-operative Bank, Facebanx, Financial Fraud Action UK, GE Money Bank, HSBC, Investec Bank Plc, Lloyds Banking Group, MBNA Bank of America, Santander, standard Chartered Bank, Tesco Bank, The Royal Bank of Scotland, Visa Europe, Worldpay.



The next edition of the EAB-Banking event in London will take place on 16 October 2015. More editions of the event are planned at various locations in Europe during 2015 and 2016. EAB-members that are interested to contribute should contact <mailto:secretariat@eab.org>.

More information and slides from the London event can be found at:

<http://eab.org/events/program/73>

## European Biometrics Workshop on Preserving Privacy in an Age of increased Surveillance in London, October 27<sup>th</sup> 2014

EAB in collaboration with IBM's Emerging Technology (ETS) organized a one-day workshop to explore the impact and implications of biometrics technologies on privacy. The event, co-chaired by Saritha Arunkumar (ETS) and Farzin Deravi (EAB), was hosted at IBM's Southbank premises in London and attracted a range of speakers and participants from different disciplines.

Dr Peter Waggett, IBM's Emerging Technology Programme Leader highlighted the objectives for the day. Speakers included Ambika Suman from Home office Centre for Applied Science and Technology, Professor Angela Sasse, Head of Information Security Research and Director of the Science of Cyber Security Research Institute at University College London, Professor Joseph Cannataci from University of Malta, Julian Ashbourn, an Independent Expert in the field of Biometrics, Dr Richard Guest from University of Kent and Simon Rogers from IBM UK.

The issues discussed covered practical experience in balancing the privacy concerns and needs of law enforcement, use-ability and user-centred design for privacy and the management of complexities, legal aspects of biometric data in the light of evolving European legislation, and descriptions of some new European projects related to biometrics, identity management and privacy.

The workshop also included a panel discussion where a range of questions were explored by the speakers and the participants together: What are the key unaddressed issues? What more do we need to know? What do we need to do?

The participants felt that the event may be repeated in a year's time to re-assess some of these issues in the light of the exciting and rapidly moving developments that were described during the workshop. The speaker's presentations from the workshop are available through the EAB website for members.

More information and slides from the London event can be found at:

<http://eab.org/events/program/70>

## Norwegian Biometrics Forum Meeting in Oslo, November 27<sup>th</sup>, 2014

On November 27<sup>th</sup> the Norwegian Biometrics Forum organized its fall meeting at the National ID Center in Oslo. At the meeting participants from several government agencies, industry and research organizations from Norway, Sweden, Denmark and other non-Scandinavian countries were represented. The meeting was organized in collaboration with the European Association for Biometrics. The Norwegian Biometrics Forum is an informal meeting place for presentation and discussion in the field of the use of biometrics.

Highlights of the meeting were the presentation from Marianne Henriksen (Skattedirektoratet Norway) and her status report on the reforming of the Norwegian population registry. Knut Lindelien (Standards Norge) provided an overview of the standardization landscape in Biometrics. Ole Marius Steinkjer (Steria Biometric, who joined recently EAB as institutional member) informed about the Norwegian ABIS system, which is currently under modernization after 20 years of operation.



The third major national project IDeALL was presented by John Thoresen (National Police Directorate), who outlined the passport and ID-card project.. Further Bjørn Erik Thon (chairman of the Norwegian DPA) discussed Biometrics and Privacy.

Also reports from industry and academia were provided, which were addressing indexing of fingerprint databases and liveness detection and presentation attack detection.

More information and slides: <http://eab.org/events/program/80>

The National ID Center is the host of the Norwegian Biometrics Forum (NBF). The next NBF meeting is scheduled for April 16<sup>th</sup>, 2015.

## German Biometric Working Group Meeting, December 16<sup>th</sup>, 2014

On December 16<sup>th</sup> the TeleTrust Biometric Working Group had its third and final meeting of the year, which was hosted by Bundesdruckerei in Berlin. The meeting was focused on topics on Fingerprint Recognition ranging from sensing techniques, over innovative privacy enhancing algorithms as well as standard conformant testing to fingerprinting in mass market applications. Highlights of the meeting were the contribution on Light Emitting Sensors (LES) by Tom Buss (IB-LLC) and the presentation on Optical Coherence Tomography (OCT) from Ralph Breithaupt (BSI). Privacy Enhancing Technology for fingerprints was the topic of Benjamin Tams (University of Göttingen), who presented his work "Combining Bloom filters and fuzzy vault scheme". An update on the fingerprint sample quality metric development project NFIQ2.0 was provided by Martin Olsen (CASED). He reported about the feature

selection process and the recent testing of the NFIQ2.0 prototype. Very fascinating was the innovative approach to use Smartphone embedded fingerprint sensors in a payment protocol, which was discussed intensively with Knud Matzerath (Postbank).

More information and slides: <http://eab.org/events/program/62>

The next meeting of the German Biometric Working Group will take place on March 18<sup>th</sup> in Darmstadt, Germany.

## 7. Impressum

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