## 2018 EAB Biometric Award





The EAB award chair, Prof Patrizio Campisi (Università degli Studi Roma Tre), the award winners Ruben Tolosana, Ester Gonzalez Sosa, Rig Das and the jury members Christoph Busch, Michel Kostucki, Javier Ortega, Arun Ross, Josef Kittler, Raymond Veldhuis together with the EAB chairman Alexander Nouak

# EAB awards three academics for excellence in European biometric research

Darmstadt, Germany, 2018-09-26

On 26 September 2018 the European Association for Biometrics (EAB) awarded young researchers for their outstanding works in the area of biometrics. An international jury chose 3 candidates out of a broad range of submitted high quality papers to present their significant contribution in front of the jury, the EAB members and the public audience.





#### **European Biometric Industry Award**

This year the European Biometrics Industry Award goes to Ruben Tolosana from Universidad Autonoma de Madrid, Spain for the thesis titled "Incorporating Touch Biometrics to Mobile Passwords". This work enhances traditional authentication systems based on Personal Identification Number (PIN) and One-Time Passwords (OTP) through the incorporation of biometric information as a second level of user authentication. In the proposed approach, users draw each digit of the password on the touchscreen of the device instead of typing them as usual. The solutions developed in this thesis are already deployed in almost 50% of the Spanish banking sector.

#### **European Biometric Research Award**

This year the European Biometrics Research Award 2018 was divided and has been granted to both Rig Das from Roma Tre University, Italy and equally to Ester Gonzalez Sosa from the Universidad Autonoma de Madrid, Spain. Rig Das focused in his PhD-thesis "Deep Learning for Face and Vein Biometrics" on the applications of deep Learning techniques over the physiological biometric traits such as EEG signal and Finger-Vein images along with Facial landmark point localisation in face recognition applications. For each of these three work area a deep learning approach based on Convolutional Neural Networks (CNN) was proposed.

The PhD-thesis "Face and Body Biometrics in the Wild: Visible and Beyond" of Ester Gonzalez Sosa work addresses the hard problem of face recognition in the wild, which struggles to achieve high performance due to the wide spectrum of variability sources it has to deal with: occlusions, blur, illumination changes, low resolution and distance, among others. A solution is provided using the potential of soft biometrics to complement face evidence in forensic surveillance scenarios and the potential of body information included in long distances scenarios.



**Ruben Tolosana** 



Rig Das



**Ester Gonzalez Sosa** 





The European Research and Industry Awards have in total a value of 4.000,- € stipendium, which is divided amongst the winners. The finalists are also donated a free of charge one year membership of EAB. The European Biometric Research and Industry Awards 2018 are kindly sponsored by Idemia and Fingerprint Cards (FPC). The selection for the research award has been made on the basis of the academic and scientific quality of the submitted works as well as on the quality of their presentations.

A separate selection was made during the final presentation in order to appoint the winner of the industry award. Criteria for this award are next to the scientific level the novelty, impact, applicability and other business aspects. This year's jury consist of the following members: Christoph Busch, Michel Kostucki, Patrizio Campisi, Javier Ortega, Arun Ross, Josef Kittler, Raymond Veldhuis.

The European Biometrics Research and Industry Award is 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 in Europe. The intention of the award is to stimulate and promote innovation and research in the field of Identity and Biometrics in Europe.

The call for submissions for the EAB Research and Industry Award 2019 is available at <u>eab.org/award/cfp.html</u>

### About EAB:

The European Association for Biometrics (EAB) is the leading voice for digital ID & biometrics in Europe. We are a non-profit, nonpartisan association.

The EAB's mission is to tackle the complex challenges facing ID in Europe, ranging from migration to privacy rights. Our role is to promote the responsible use and adoption of modern digital identity systems that enhance peoples lives and drive economic growth.

Through a series of EAB initiatives we support all sections of the ID community across Europe, including governments, NGO's, industry, associations and special interest groups and academia. Our initiatives are designed to foster networking and debate, whether at an EAB hosted event across Europe, or in providing impartial advice & support to individual members.

We ultimately serve the citizens of Europe in the advancement of modern digital identity systems that are fair, accessible, secure & private.

More info: <u>www.eab.org</u>

