

# **EAB RPC 2023**

**18-20 September**

**Conference Guide**



# TABLE OF CONTENTS

<b>About</b>	<b>3</b>
<b>Program</b>	<b>4</b>
<b>Forewords</b>	<b>12</b>
<b>Messages from the Organisers</b>	<b>16</b>
<b>Projects</b>	<b>21</b>
<b>Round Table</b>	<b>41</b>
<b>Speakers</b>	<b>44</b>
<b>Organising Committee</b>	<b>62</b>
<b>Partners</b>	<b>67</b>
<b>Useful Info</b>	<b>69</b>
<b>Save the Date</b>	<b>71</b>
<b>About EAB</b>	<b>72</b>



# ABOUT

The 10th edition of the EAB Research Projects Conference will take place from 18 to 20 September 2023. The conference is organised by the European Association for Biometrics (EAB) with the contribution of eu-LISA through its Governance and Capabilities Unit, the support of DG HOME of the European Commission and Fraunhofer IGD.

The EAB-RPC will be co-located with the IEEE BIOSIG Conference, the [“TeleTrustT Biometric Workshop”](#) and is part of the Darmstadt Biometric 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 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.





# PROGRAM



# Monday, 18th of September

## Conference Opening

### Start End

14:45	15:00	Alexander Nouak	EAB	Conference Opening
		Dinusha Frings	EAB	
		Javier Galbally	eu-LISA	

## Keynote eu-LISA

Chair: Javier Galbally

### Start End

15:00	15:30	Agnes Diallo	Executive Director, eu-LISA	Keynote Speech
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15:30 15:45

Communication Break

## Project session: mGov4EU, ITFLOWS, CEASEFIRE

Chair: Fernando Alonso

### Start End

15:45	16:05	Rachelle Sellung	Researcher at Fraunhofer IAO	mGov4EU
		Carsten Schmidt	University of Tartu	mGov4EU

16:05	16:25	Georgios Stravropoulos	Research associate with CERTH/ITI; Chief Technology Officer of Parhelia Analytics Ltd	ITFLOWS
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16:25	16:45	Georgios Stravropoulos	Research associate with CERTH/ITI; Chief Technology Officer of Parhelia Analytics Ltd	CEASEFIRE
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16:45 17:00

Communication Break

# Monday, 18th of September

## Session industry I - Secunet, TBS

Chair: Alexander Nouak

### Start End

17:00	17:20	Christian Rathgeb	Senior Expert for Data Science & Biometrics	SECUNET
17:20	17:40	Martin Drahansky	Research Leader at Touchless Biometric Systems	Touchless Biometric Systems AG
		Ondřej Kanich	Occupational Safety Research Institute	Touchless Biometric Systems AG

## Demo Sessions - TBS, MediaVerse, BullyBuster, RESPECT, IDENTT

Chair: Fernando Alonso-Fernandez

17:40	18:40	Martin Drahansky, Ondřej Kanich	Touchless Biometric Systems AG
		Dimitris Karageorgiou	MediaVerse
		Gian Luca Marcialis	BullyBuster
		Massimiliano Todisco Michele Panariello	RESPECT
		Paweł Narolski, Wojciech Wodo	IDENTT

**17:40 19:40**

**WELCOME DRINKS AND  
GET TOGETHER**

# Tuesday, 19th of September

## Keynote: DG HOME

Chair: Javier Galbally

### Start End

9:30	10:00	Giulio Mancini	Policy Officer at DG HOME of the European Commission	Keynote Speech
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10:00 10:15

Communication Break

## Project Session: EUROPOL, LIMPID, SOTERIA

Chair: Marta Gomez-Barrero

### Start End

10:15	10:35	Eleni Kotionia	Quality Manager and Document Expert	European Cybercrime Centre (EC3) - Europol
10:35	10:55	Pavlo Mozharovskyi	Associate Professor at Télécom Paris	LIMPID
		Philippe Hercelin	Innovation Program Manager within Global R&D of IDEMIA	LIMPID
10:55	11:15	Nathan Ramoly	Research Scientist at IDnow	SOTERIA

11:15 11:45

Communication Break



# Tuesday, 19th of September

## Project Session: iMARS, MediaVerse, BULLY BUSTER

Chair: Adithyan Nair

Start	End			
11:45	12:05	Kiran Raja	NTNU	iMARS
12:05	12:25	Dimitris Karageorgiou	Researcher at CERTH	MediaVerse
12:25	12:45	Gian Luca Marcialis	Associate Professor at the University of Cagliari	BULLY BUSTER

12:45 14:00

**LUNCH BREAK**

## Project Session: PRIMA

Chair: Fernando Alonso-Fernandez

Start	End			
14:00	14:20	Luyi Sun	NTNU	PriMA
14:20	14:40	Amina Bassit	University of Twente	PriMA

## Session industry II - IDENTT

Chair: Javier Galbally

Start	End			
14:40	15:00	Wojciech Wodo	Biometrics and Cybersecurity Consultant	IDENTT
		Paweł Narolski	Head of Research and Development	IDENTT

15:00 15:15

**Communication Break**

# Tuesday, 19th of September

## Project Session: RESPECT

Chair: Fernando Alonso-Fernandez

Start	End			
15:15	15:35	Marta Gomez-Barrero	Ansbach University	RESPECT
15:35	15:50	Massimiliano Todisco	Professor of audio and speech technologies at EURECOM	RESPECT

# Wednesday, 20th of September

## Keynote DHS-OBIM

Chair: Javier Galbally

### Start End

9:30	10:00	William Graves	Deputy Assistant Director, DHS-OBIM	Keynote Speech
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10:00 10:15

Communication Break

## Project Session: TRESSPASS ETN

Chair: Marta Gomez-Barrero

### Start End

10:15	10:35	Monique Kalsi		TReSPAsS-ETN
10:35	10:55	Oubaida Chouchane	PhD Researcher at EURECOM	TReSPAsS-ETN

10:55 11:15

Communication Break

## Project Session: MAMMoTH, TENSOR, FLEXI-CROSS

Chair: Alexander Nouak

### Start End

11:15	11:35	Ioannis Sarridis	Research Associate at CERTH	MAMMoTH
11:35	11:55	Eleni Veroni	Research & Innovation Project Manager at Netcompany-Intrasoft SA	TENSOR
		Spyros Evangelatos	Senior R&D expert for Netcompany-Intrasoft	TENSOR



# Wednesday, 20th of September

11:55	12:15	Giuseppe Vella	Head of Border Management and Defence Research at Engineering Ingegneria Informatica S.p.A.	FLEXICROSS
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12:15 13:30

LUNCH BREAK

## Round Table: Advancing Biometric Technology and ID Management in the EU: Exploring the Need for Testbeds and Sandboxes

Chairs: Fernando Alonso, Javier Galbally

**Start End**

13:30	14:50	William Graves	DHS
		Patrick Grother	NIST
		Pedro Torres	Youverse
		Javier Galbally	eu-LISA

## Closing

**Start End**

14:50	15:00	Javier Galbally	eu-LISA	Conference Closing
		Alexander Nouak	EAB	



# FOREWORDS



## Foreword

Dear conference participants!

I am delighted to extend my warmest greetings on behalf of eu-LISA - the European Union Agency for the Operational Management of Large-Scale IT Systems in the Area of Freedom, Security and Justice.

Established in 2012, eu-LISA oversees the development and operation of a growing number of information systems that facilitate collaboration between European justice and law enforcement authorities in the areas of border management, visas, migration, asylum and justice. As such, the Agency is responsible for the management of one of the most complex ecosystems of large-scale IT systems in the world, contributing to ensuring free movement and internal security for one of the world's largest borderless territories - the Schengen Area.

At eu-LISA, we are honoured to co-organise with the European Association on Biometrics (EAB) the 10th edition of the EAB Research Projects Conference, convening some leading experts from academia, industry and public institutions to discuss the latest developments in biometrics and identity management.

In recent years, eu-LISA has significantly expanded its expertise in this area, as the Agency is spearheading a uniquely challenging transformation programme by implementing the EU's new information architecture that will ensure interoperability between the various large-scale IT systems that facilitate cooperation between European border management and law enforcement authorities.

Over the course of the coming years, the Agency is scheduled to roll out three new large-scale IT systems – the Entry/Exit System (EES), the European Travel Information and Authorisation System (ETIAS), and the European Criminal Records Information System for Third Country Nationals and stateless persons (ECRIS-TCN), as well as several interoperability components that facilitate identity management and the exchange of biometric information.



As new technologies become an increasingly core driver of our operations and development projects, eu-LISA has further stepped up its support for technology research, with a special focus on biometrics-related applications. In this context, the Agency has established a clear path forward with regard to this thriving technology, focusing on five main areas of interest, in line with the EU's overall position as elaborated in upcoming legislation, such as the EU's AI Act and the European Data Act:

- **Interoperability.** The European Commission has tasked eu-LISA with achieving overarching systems interoperability between the EU's large-scale IT systems managed by the Agency. To that end, eu-LISA is actively involved in the work of ISO subcommittee SC37, focusing on the standardisation of biometrics in order to set a strong foundation for this systems interoperability, to ensure business continuity and to avoid vendor lock-in situations that may decrease the quality of our services.
- **Data protection.** One of eu-LISA's main priorities is to respect and safeguard personal data protection rights. As we are dealing with biometric data, which is considered sensitive personal data by EU's GDPR, eu-LISA's focus is on solutions that are privacy-friendly by design.
- **Algorithmic fairness.** To better serve the EU community and citizens. The regulatory framework for the EU's JHA information systems and the Agency's work to implement those regulations are driven towards the benefit of the citizens, in order to provide the best quality solutions and services. This includes ensuring the equal treatment of all citizens, regardless of their ethnicity, sex or age. For that reason, we encourage, promote and contribute to new research that focuses on the elimination of demographic bias from biometric algorithms.
- **Vulnerability protection.** With the introduction of a higher complexity in the ecosystem of large-scale IT systems managed by eu-LISA, comes also an increase in the potential vulnerability points that need to be taken into account. This new environment affects also biometric technology, requiring even more careful research to discover potential new vulnerabilities.
- **Testing.** All the above priorities cannot be achieved without the ability to properly test algorithms and systems. In the coming years, Europe will have to focus on the enhanced development of testing capabilities (e.g., testing facilities and sandboxes) and the establishment of a common data research space for security applications. In this context, eu-LISA has actively engaged with academia to explore new solutions for the generation of synthetic data (both for face and fingerprints) as a promising approach to solve the availability of data for testing purposes.

As we continue to navigate the evolving landscape of biometrics and identity management, it is conducive to better outcomes that we come together, share insights, and forge partnerships that will enrich our understanding of current trends and emerging challenges in our field. Over the years, the EAB Research Projects Conference has provided a valuable forum for a wide variety of stakeholders – the scientific community, public institutions, industry and end-users – to discuss not only technical matters, but also to reflect on the best practices in using biometric applications and to agree on a common framework that will enable these technological innovations to contribute to Europe's security and freedom in a manner that respects individual privacy and adheres to high ethical standards.

For this reason, the EAB RPC is one of the most anticipated events on eu-LISA's research calendar, and we are privileged to be co-organisers.

On behalf of eu-LISA, I encourage the biometrics community to make the most of this event by actively engaging in the exchange of ideas, and taking advantage of the wide variety of opportunities for networking that this conference has to offer. I would also like to take this opportunity to thank the European Commission's DG HOME and Fraunhofer IGD for their generous support.

We are eagerly awaiting to learn about the latest advances in biometrics research that will help chart our journey forward. Only by working together will we be able to keep Europe free, safe and secure!

**Agnes Diallo**  
**Executive Director,**  
**eu-LISA**

The background is a solid blue color with several geometric elements. In the top right, there is a light blue hexagon. Below it and to the left is a yellow hexagon. In the bottom right, there is a large light blue hexagon and a smaller dark blue hexagon. A network diagram with white dots and lines is visible in the background, particularly on the right side.

# MESSAGES FROM THE ORGANISERS





# Foreword

## Alexander Nouak

Dear conference participants!

We are very excited for you to join us in celebrating the special 10th edition of the EAB RPC. What a decade it has been for the EAB! This milestone makes us extremely proud as we reflect on the extraordinary journey that has brought us here.

With each passing year, the European Association for Biometrics has been dedicated to fostering collaboration, innovation, and dialogue in the world of biometrics and digital identity. In this time, the EAB RPC has become a place where a vibrant community comes together every year to discover the latest biometric developments, and even more importantly, to forge bonds, partnerships, and friendships that last years!

To each participant, speaker, and supporter, we want to say – THANK YOU! You are the heart of our community. It is your passion, dedication and insights that have transformed this conference into an enduring tradition, a hub of innovation, and a platform for ideas that carry out meaningful impacts into the wider world.

This decade has been significant not only for our organisation, but also for the whole landscape of biometrics & digital identity. The market of biometrics & digital identity has shifted dramatically, embracing groundbreaking concepts, cutting-edge solutions, and new legislation!

In the past year alone, the domain of biometrics & digital identity has experienced quantum leaps, particularly regarding their key underlying technology – Artificial Intelligence. Notably, the European Union's AI Act is set to establish new benchmarks for responsible AI deployment, underscoring the importance of ethical considerations and accountability.

At the same time, this year, society on a wider scale had the first opportunity to interact with AI innovations that are bound to reshape human-computer interactions. Through this experience, we have witnessed the double-edged nature of these innovations, which cannot be overlooked – while these innovations bring incredible benefits, they also pose challenges we need to address together.

Moreover, in 2023, we celebrated the 5th anniversary of the General Data Protection Regulation and we saw the European Commission's adoption of its adequacy decision for the EU – U.S. Data Privacy Framework, which aims to improve the security and preservation of sensitive personal data flows from the EU to the U.S. Biometric data also falls under this framework, demonstrating the ways in which biometric information is increasingly transmitted on a global scale. This framework exemplifies a significant commitment to the security of that data.

Among these transformative changes, one constant remains: the importance of upholding human rights, privacy, and ethics. As we embrace new possibilities, we must ensure that progress aligns with our values. This responsibility falls on all of us and this is why we want to make your voice heard at this conference and beyond!

This year's conference will welcome you at the Fraunhofer Institute for Secure Information Technology SIT – a new venue that adds a touch of novelty to our celebrations. As you engage in the program's offerings, remember to enjoy the breaks and evening events to connect with fellow members of the biometrics & digital identity community. Reflect on the past decade, explore new ideas and perspectives, and make informed decisions about how you want to forge a way forward in the world of biometrics for the decade to come.

If you are looking to amplify your ideas and initiatives, consider joining forces with the European Association for Biometrics. Whether you are a seasoned member or new to the community, the EAB is here to support you. Let us collaborate on how we can make your impact even more powerful.

For now, I wish you an engaging and inspiring conference ahead.

**Alexander Nouak,**  
**Chairman**  
**European Association for Biometrics**

# From the Conference Chair



Dear participants,

As Chair of the conference, on behalf of the whole organising committee, it is my pleasure to welcome you to the 10th Edition of the EAB Research Projects Conference (EAB-RPC) 2023, organised by the European Association for Biometrics (EAB) in cooperation with eu-LISA (through its Governance and Capabilities Unit), DG HOME (through its F.2 Innovation and Security Unit) and the Fraunhofer IGD.

The conference was born already ten years ago with the aim of providing a common platform to European funded projects using biometric recognition in such fields as identity management, border management, and law-enforcement, to disseminate their results and to present the latest developments in these key areas for the future of the European Union. I believe that it is safe to say that, since its inception, all the way to this 10th edition, the conference has grown and has brilliantly achieved its original goal, consolidating itself as one of the yearly main research events in biometrics.

Furthermore, the conference has become a meeting venue not only for researchers, but also for all other stakeholders in the field of biometrics, including policy makers, industry and agencies in the Justice and Home Affairs (JHA) domain.

We are proud to be able to say that many of the participants from previous editions have praised the event due to its uniquely inclusive, participative and integrative scope. Such philosophy has allowed former attendees to better understand the needs and points of view of other parties, at the same time that it has provided them the opportunity to enlarge their professional network and to build new partnerships.

I believe that, during the difficult COVID lock-down and isolated times (let's not forget about that period), we have all learned to value the importance of face-to-face interactions and, therefore, during the structuring of the program, we have put a lot of emphasis on the social dimension of EAB-RPC, leaving long coffee/lunch breaks in between sessions and organising one get-together event (a welcome cocktail on the first day). Coffees and beers will hopefully help you to catch up with friends and acquaintances and to get to enlarge your professional network.

In addition to the social dimension of the event, we are proud to announce that the 2023 edition of EAB-RPC features three high-level keynote speakers that will surely provide some enlightening insight to participants on the European and US perspective on the field of JHA and the key role that biometrics will play in it, namely:

- **Ms Agnes Diallo**, Executive Director of eu-LISA
- **Mr Giulio Mancini**, Policy Officer of DG HOME F.2
- **Mr William Graves**, Deputy Assistant Director of the US DHS-OBIM

Of course, as it has been the case from its first edition, the conference remains true to its roots and will include multiple technical presentations from 13 different European funded projects carrying out research in the field of biometrics.

Following what has become almost a tradition, the event will close with a roundtable focused on the need to further develop and enhance the testing capabilities in the EU to assess biometric systems and algorithms, as a key aspect of the continuous development and improvement of this thriving technology.

In summary, we have worked hard to put together for you the best possible conference and we really hope that all attendees enjoy the event and get useful and valuable takeaways from it.

Welcome to the EAB-RPC 2023!

**Javier Galbally**  
**Chair of EAB-RPC**





# PROJECTS

# OVERVIEW OF THE PROJECTS

<b>BULLYBUSTER</b>	<b>23</b>
<b>CEASEFIRE</b>	<b>24</b>
<b>EUROPOL</b>	<b>25</b>
<b>FLEXI-CROSS</b>	<b>26</b>
<b>IDENTT</b>	<b>27</b>
<b>iMARS</b>	<b>28</b>
<b>ITFLOWS</b>	<b>29</b>
<b>LIMPID</b>	<b>30</b>
<b>MAMMoTH</b>	<b>31</b>
<b>MediaVerse</b>	<b>32</b>
<b>mGOV4EU</b>	<b>33</b>
<b>PRIMA</b>	<b>34</b>
<b>RESPECT</b>	<b>35</b>
<b>SECUNET</b>	<b>36</b>
<b>SOTERIA</b>	<b>37</b>
<b>TBS</b>	<b>38</b>
<b>TENSOR</b>	<b>39</b>
<b>TRESPASS ITN</b>	<b>40</b>



# BULLY BUSTER



In this project, four Southern Italian Academies aim to synergically cooperate to develop artificial intelligence-based software tools for bullying and cyberbullying action detection.

Their proposal starts from the state-of-the-art on behavioral biometrics and crowd analysis in computer vision systems and the recent efforts of criminal behavioral modeling in psychology and juridical fields. The tools operate on different kinds of data sources: (1) video-based analysis, by segmentation and characterization of the scene using temporal and spatial textural descriptors, to detect specific bullying actions based on the crowd movements around the victim; (2) text-based analysis, by the detection of words and sentences typical of cyberbullying harassment, oppression, and stalking; (3) behavioral analysis by the detection of the keystroke dynamics and touch analytics. Psychological models of criminal behavior inspire the statistical and generative models behind this tool.

To make them usable and testable in realistic scenarios, juridical and privacy implications are studied, and a proposal to overcome them is also among the project results.



**Gian Luca Marcialis will present BULLY BUSTER during the RPC.**



# CEASEFIRE



Ceasefire targets the development of a highly innovative, holistic, multi-disciplinary, high-tech and versatile approach for significantly increasing/broadening the operational capabilities of EU Law Enforcement Agencies (LEAs) in their struggle to detect, analyze and track cross-border illicit firearms trafficking related activities.

In particular, Ceasefire efforts will concentrate on the following major driving axes: a) The development of advanced Artificial Intelligence (AI) technologies for significantly facilitating the everyday work of the involved practitioners, and b) The establishment of fully-operational National Focal Points (NFPs), by targeting to alleviate from current organizational, operational, cooperation, legal, cross-jurisdictional, trans-border and information exchange challenges. The former corresponds to a wide set of AI-enabled tools, including solutions for cyber patrolling, Web data gathering, on-the-spot detection of firearms, advanced Big Data analytics, cryptocurrency analysis, large-scale information fusion, visual analytics and firearms-related intelligence collection.

On the other hand, particular attention will be given towards defining models, protocols and procedures for making NFPs fully functional, complemented by activities for mapping the various legal frameworks (within different countries) and procedures (within different agencies) for harmonizing investigations, cooperation, lawful evidence collection and forensics analysis. The development of efficient information sharing mechanisms among LEA (police, border guard, customs), judicial and forensics authorities will further reinforce the system capabilities.

Moreover, the tasks of Ceasefire will complement the objectives and activities of the EU Policy Cycle (EMPACT) – Firearms (where partner MIRPN acts as Driver and partner FMI as Co-driver), while continuous guidance from the European Firearms Experts (EFE) group (where partner PSP acts as the Chair) is foreseen.



**Georgios Stavropoulos will present CEASEFIRE during the RPC.**



# EUROPOL



Exploring Biometric vulnerabilities: Presentation attacks on capture devices.

The objective is to encompass four biometric traits: face, fingerprints, iris, and voice, along with their associated presentation attacks at capture devices. Collaborative endeavors unite biometric specialists from academia, Law Enforcement Authorities, and European Agencies, as coordinated by Europol (Innovation Lab-Observatory Office and EC3-Forensic Support), aiming to lay the foundation for biometrics-specific requirements, and solutions, and raising awareness within Law Enforcement Authorities. More specifically, Identity verification processes and systems consist of several parts, which provide a range of different opportunities for attacks. There are, of course, several different ways to attack digital systems or their hardware directly. While this is certainly very important for the correct functioning of these systems, the report will focus on attacks based on the biometrics themselves. With the intention to impersonate a bona fide user (enrolled data subject) or to evade biometric recognition (obfuscate identity). The expected publication is autumn 2023.

**Eleni Ktonia will present  
EUROPOL during the RPC.**



# FLEXI-CROSS FLEXIcross

The FLEXI-cross (Flexible and Improved Border-Crossing Experience for Passengers and Authorities) project started on September 2022 and it is in the initial phase. It aims to increased security and reliability of EU border mobile checks for people and goods, while enhancing and improving the border management capabilities. The FLEXI-cross solution will be developed and deployed as an innovative border-checking solution, in real operational environments, addressing road, rail and port borders. The resulting flexibility and dynamicity of border check planning will offer novel capabilities such as dynamic deployment of check-points and support via mobile applications for border personnel, while guaranteeing high level of security, privacy of personal data and protection of people's fundamental rights.



**Giuseppe Vella will  
present FLEXI-CROSS  
during the RPC.**



# IDENTT

IDENTT®

Liveness Detection, next-generation presentation and injection attack detection system for face comparison scenarios in automated identity verification. Our project has involved extensive research and development work on the presentation attack detection measures, including: (1) screen detection, (2) projected image detection, (3) print detection, (4) mask detection, (5) depth analysis from widely available sensors (such as Apple TrueDepth cameras). Additionally, we have actively researched DeepFake injection attack detection measures. We are currently entering the technical prototype stage of the project. Our prototype will be presented during the planned demonstration.



**Wojciech Wodo and  
Paweł Narolski will  
present IDENTT during  
the RPC.**





iMARS project aims at developing solutions to address threats of ID document fraud and image manipulation attacks. The project will seek to reinforce the security of ID documents and will provide solutions to address gaps in four reference scenarios: enrolment, renewal, border control and forensic investigation. This will be done in line with the requirements formulated by ICAO and operators of Automated Border Control (ABC) systems.

iMARS will ensure the uptake of the project's outcomes after its end by providing training, guidelines and best practices to border guards and passport application officers. It will also contribute to the ongoing standardisation efforts in the field of presentation attack detection and face image quality.



**Kiran Raja will present  
iMARS during the RPC.**



# ITFLOWS



Prediction and management of migration are a major challenge for the European Union and also for many different stakeholder groups that provide resources and assistance to migrants along their journey. Yet, in order to develop better strategies and instruments among policy makers and practitioners in the field of migration, we still need a deeper understanding of this phenomenon.

ITFLOWS will generate novel insights on migration. The purpose of ITFLOWS is to provide accurate predictions and adequate management solutions of migration flows in the European Union in the phases of reception, relocation, settlement and integration of migration, according to a wide range of human factors and using multiple sources of information. These insights will be provided by an evidence-based ICT enabled solution (the EUMigraTool) and precise models. All solutions will have fitness for purpose continually validated by policymakers and practitioners in cooperation with civil-society organisations in a dynamic and iterative process.

ITFLOWS will propose tailor-made solutions for practitioners and policy makers for managing migration. On the one hand, the EUMigraTool targets first-line-practitioners, second-level reception organisations and municipalities. It will provide modular solutions based on the prediction of migration flows and the identification of risks of tensions between migrants and EU citizens. On the other hand, an in-depth analysis on drivers, patterns and choices of migration as well as public sentiment towards migration will lead to the drafting of adequate recommendations and good practices for policy makers, governments and EU institutions.



**Georgios Stavropoulos  
will present ITFLOWS  
during the RPC.**



# LIMPID



A huge increase of collected data, storage capacity and computing power promote the field of Artificial Intelligence (AI) to the status of panacea to all problems. Indeed, neural networks improved the results in the fields challenging for the handcrafted algorithms previously. However, there is always a price to pay: number of its drawbacks remain unaddressed. In the real world, a decision system with AI can receive an input that is unlike anything it has seen during training. That can lead to the unpredictable behavior. Can we trust the output of such system for a particular input? In LIMPID project, we address this issue of confidence of AI output in the context of face recognition and face quality estimation in images. LIMPID concentrates on a challenge how to estimate the confidence to any response of AI algorithm. This approach can be used in a wide range of applications. LIMPID also proposes the analyses of the image features that highly contribute to the AI algorithm's decision.

LIMPID is for Leveraging Interpretable Machines for Performance Improvement and Decision. It is a 3-year interdisciplinary research program started in December 2020. Conducted by Télécom Paris (LTCI and I32) and IDEMIA, funded in part by the French National Research Agency, IDEMIA is acting as scientific coordinator of the project. LIMPID objective is to achieve trustworthy image recognition systems by design based on:

- Methods to test for bias, and to apply bias mitigation measures to image recognition systems, including facial recognition;
- Development of approaches to explainability by design for various image recognition use cases;
- Confrontation bias-mitigation and explainability by design with regulatory requirements for fair and explainable image recognition, and identify gaps between regulatory requirements and proposed technical solutions.

Over the past months, our face research team has worked on improving fairness for face recognition (with outstanding performances in the latest FRVT submission) whereas work has also been done on improving fairness for face qualities estimation.

**Philippe Hercelin and  
Pavlo Mozharovskyi will  
present LIMPID during  
the RPC.**



# MAMMOTH



The EU-funded MAMMOth project tackles algorithmic bias by focusing on multi-discrimination mitigation for tabular, network and multimodal data. Working with computer science and AI experts, the project will create tools for fairness-aware AI which ensure accountability with respect to protected attributes like gender, race and age. The project will also engage with communities of vulnerable and/or underrepresented groups in AI research to ensure that user needs and pains are truly at the centre of the agenda. The end goal is to develop pilot projects for finance/loan applications, identity verification and academic evaluation. In our presentation, special focus will be given to the detection and mitigation of bias in images with a particular emphasis on bias-aware attribute extraction and identity verification.



**Ioannis Sarridis will  
present MAMMOth  
during the RPC.**



# MediaVerse



The MediaVerse project is working towards the creation, enrichment and distribution of next-generation media, by building the needed software infrastructure and technology for decentralized media asset management. The aim is to help users create and publish content, while keeping control over the content shared.

To this end, MediaVerse offers several AI-driven features to support automated editorial content moderation and identification, verifying the integrity of content, authoring immersive experiences, making content accessible, and providing insights through social analytics and collaboration tools.

Our presentation will focus on the MediaVerse verification tools that help with the task of detecting digitally manipulated and AI-generated image content. A live demonstration will be carried out using the developed Media Asset Annotation and Management (MAAM) application.



**Dimitris Karageorgiou**  
will present MediaVerse  
during the RPC.





# mGov4EU



mGov4EU pushes forward the practical use of inclusive mobile Government services in Europe, bringing such services in line with EU citizens' expectations for safe, resilient and sustainable mobile communication. Innovating electronic identity management, storage of data and the exchange of electronic documents are key elements.

Starting from the foundation of Single Digital Gateway Regulation (SDGR), mGov4EU provides new ways of cross-border service provision correlated and interlinked with eIDAS Regulation on cross-border identification and authentication. mGov4EU leverages for the first time both together, SDGR and eIDAS for mobile-device usage.

We are currently in the last 4 months of our project, which will end December 2023.



**Rachelle Selung and  
Carsten Schmidt will  
present mGov4EU  
during the RPC.**



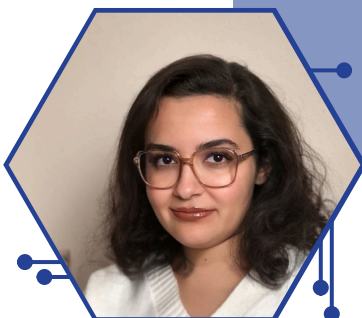
# PriMa



The rapid digitalisation of society, characterised by a ubiquity of sensors (in mobile devices, CCTV cameras, IoT devices), a high degree of interconnectivity, cloud storage of all sorts of data, and extensive processing power, comes with increasing technology for personal information capture. Consequently, there is growing challenge to establish and maintain individual privacy. One factor contributing to the erosion of privacy is the growth in recognition technologies that not only facilitate the recognition of individuals but also the inference from biometric data of emotional state, gender, health, age, and even profession. Another factor is fast advancement of artificial intelligence, allowing for extensive data mining, and aggregation, linkage and inference of personal information. Hence, there is a real possibility that acceptable privacy may become unattainable, unless technological and societal steps are taken to allow citizens to regain control of their personal information.



**Luyi Sun and Amina Bassit  
will present PRIMA at the RPC.**



# RESPECT



RESPECT, a Franco-German collaborative project, explores the potential of using multi-biometrics as a means to defend against diverse PAs and improve generalisation while still preserving privacy. Central to this idea is the use of (i) biometric characteristics that can be captured easily and reliably using ubiquitous smart devices and, (ii) biometric characteristics which facilitate computationally manageable privacy preserving, homomorphic encryption.

The research focuses on characteristics readily captured with consumer-grade microphones and video cameras, specifically face, iris and voice. Further advances beyond the current state of the art involve the consideration of dynamic characteristics, namely utterance verification and lip dynamics. The core research objective is to determine which combination of biometrics characteristics gives the best biometric authentication reliability and PAD generalisation while remaining compatible with computationally efficient privacy preserving BTP schemes.



**Marta Gomez-Barrero,  
Massimiliano Todisco  
and Michele Panariello  
will present RESPECT at  
the RPC.**



# SECUNET

**secunet**

secunet Security Networks AG comprises the divisions eHealth, Homeland Security, Industry, Public Authorities and Defense & Space. Their customers include federal ministries, more than 20 DAX-listed corporations, and many international authorities and organizations such as the EU Commission. secunet is an IT security partner of the Federal Republic of Germany and partner of the Alliance for Cyber Security.

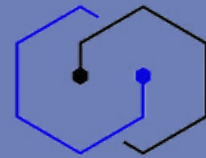
AntiBias is a project that specialises in the analysis and development of AI models for facial recognition, with the aim of identifying and reducing demographic differentials and the potential bias that results from it.



**Christian Rathgeb will  
present SECUNET  
during the RPC.**



# SOTERIA



**SOTERIA**  
DIGITAL SECURITY AND PRIVACY

SOTERIA aims to drive a paradigm shift on data protection and enable active participation of citizens to their own security, privacy and personal data protection. SOTERIA will develop and test in 3 large-scale real-world use cases, a citizen-driven and citizen-centric, cost-effective, marketable service to enable citizens to control their private personal data easily and securely. Led by an SME, this project will develop, using a user-driven and user-centric design, a revolutionary tool, uniquely combining, in a user-friendly manner, a high-level identification tool with a decentralised secured data storage platform, to enable all citizens, whatever their gender, age or ICT skills, to fully protect and control their personal data while also gaining enhanced awareness on potential privacy risks.

SOTERIA will be tested and validated through 3 real-world largescale use-cases, involving 6,500 European citizens, targeting 3 applications which usefulness has been highlighted during COVID-19 pandemic: e-learning, e-voting and e-health. This 3-year transdisciplinary project from both SSH and technology angles, will develop an innovative solution based on: a secured access interface relying on high-level identification, a smart platform processing data to transmit only the minimum personal data required, a secured data storage platform (decentralized architecture) under the full control of the citizen, an educational tool to raise awareness of citizens developed using a citizen-driven and citizen-centric approach. The technologies developed will i) empower citizens to monitor and audit their personal data; ii) restore trust on privacy, security and personal data protection of citizens in digital services; iii) be fully compliant to GDPR regulation and apply strictly the data minimization principle; iv) ensure cybersecurity.

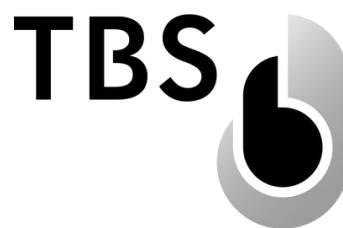


**Nathan Ramoly will  
present SOTERIA at  
the RPC.**





# Touchless Biometric Systems



There will be shortly presented 3 biometric projects. The first one, TOBIAS, is oriented on the R&D of the device 3D FLY (touchless acquirement of fingerprints) for speed gates, supported from the European program EUREKA.

The second project, BEFFIC, is oriented on the device 3D FLOW, which combines fingerprints with face and biometric passports and is supposed to be used in biometric e-gates, and is supported by the Czech Ministry of Interior.

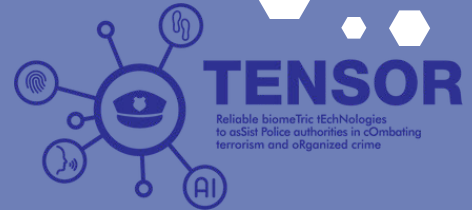
The last project "The development of an application for automated register of hunted ungulates based on the individual structure of outer nose skin tissue", is oriented on animal biometrics and is financed by the Czech Ministry of Agriculture.



**Martin Drahansky and  
Ondrej Kanich will present  
Touchless Biometric  
Systems during the RPC.**



# TENSOR



TENSOR (Reliable biometric technologies to assist Police Authorities in combating terrorism and organized crime) is set to enhance public safety in the EU by revolutionising the investigation capabilities of forensic institutes and Police Authorities through the use of emerging biometric technologies. This 3-year innovation action, supported by the Horizon Europe Programme, brings together 20 partners from 15 European countries on the way to accelerate the adoption of modern biometric solutions in law enforcement and create a common ground among security practitioners and researchers by introducing the one-of-its-kind European Biometric Data Space.

Currently in its first year of implementation, TENSOR's goal is to provide Police Authorities with a platform that facilitates biometric evidence extraction, sharing, and storage in cross-border environments, allowing them to share best practices in an automated, robust, secure, privacy-preserving and scalable manner. TENSOR plans to exploit them by fusing more distinctive (e.g., fingerprint) with less distinctive features (e.g., scars) to strengthen their acceptance in court. In TENSOR, lawful evidence derived from CCTVs (face, gait, voice), mobile devices (behavioural patterns) and fingerprints, will be combined with more or less distinctive features towards accurate and multimodal identification and criminal identity verification. These tools will also help unlock criminals' mobile devices and enhance the interoperability among legacy systems owned by security practitioners and Forensic Institutes. In addition to the extraction and sharing of biometric intelligence, TENSOR will also provide a privacy-preserving space operating over an accountable and sovereign blockchain infrastructure for storing biometrics through a biometric data protection mechanism, enabling the revocability of biometric templates. At the heart of the TENSOR project lies the creation of a unique European Biometric Data Space, which will enable seamless sharing of biometric data between stakeholders, allowing for faster and more accurate identification of suspects.

**Eleni Veroni and  
Spyros Evangelatos  
will present TENSOR  
at the RPC.**



# TReSPAsS-ETN



TReSPAsS-ETN is an EU-funded project, a consortium of seven universities backed by seven industrial entities spanning France, Germany, Netherlands, Switzerland, Spain, and Belgium. The primary objective is to train Early Stage Researchers (ESRs) at the confluence of biometrics, attack detection, privacy, security, and the legal and ethical dimensions. Given its interdisciplinary nature, the network emphasizes collaboration among researchers, legal experts, and non-academic partners, pooling diverse backgrounds and complementary expertise. Currently, TReSPAsS-ETN is in its final stage, working towards successfully achieving its comprehensive research and training objectives.



**Monique Kalsi and  
Oubaida Chouchane  
will present TReSPasS  
at the RPC.**



The background features a light blue gradient with a network of thin white lines and dots. Several hexagonal shapes are overlaid: a large light blue one on the left, a dark blue one in the top right, a yellow one in the middle right, and two overlapping dark blue ones in the bottom right.

# ROUND TABLE

# ADVANCING BIOMETRIC TECHNOLOGY AND ID MANAGEMENT IN THE EU:

## EXPLORING THE NEED FOR TESTBEDS AND SANDBOXES

### BACKGROUND

There is a growing need for the European Union (EU) to establish robust testbeds and sandboxes for the evaluation of biometric technologies and ID management systems. Testbeds and sandboxes allow researchers, developers, and stakeholders to assess the performance, reliability, and interoperability of emerging technologies. This provides an opportunity to assess how these technologies perform in real-world scenarios and under various conditions. Rigorous testing enables the identification of strengths, weaknesses, and areas for improvement, fostering the refinement and advancement of these technologies. Testing and evaluation platform exist in the US, however there is a necessity for a comparable platform tailored to the unique requirements and challenges in Europe.

This need has been recognised by EU bodies and reinforced through initiatives like the call for projects "EU Data Space for Security and Law Enforcement". This call aims to create a common data platform and communication infrastructure with trusted datasets for training, testing, and validating AI algorithms for security and law enforcement. Furthermore, the EU Data Strategy, as well as its broader strategic framework on excellence and trustworthiness of AI, underscores the significance of reliable and diverse datasets for training, testing, and development of trustworthy AI. The establishment of EU-based testbeds and sandboxes for evaluating biometric technology and ID management systems would align with the strategic priorities of the EU on the need for trustworthy AI and the importance of data-driven innovation.

To address this, the EAB-RPC roundtable will bring together experts from various organisations and backgrounds, including key stakeholders from industry, governmental agencies, and academia. These experts will provide unique perspectives and engage in a comprehensive discussion to shed light on the challenges and opportunities associated with establishing testbeds and sandboxes in Europe, whilst aligning these factors with the goals of the EU Data Strategy and the Commission's position on AI.



# TOPIC

The roundtable of the EAB-RPC will focus on the necessity and feasibility of creating a dedicated testing and evaluation platform for biometric technology and ID management technologies in the EU.

## PANELISTS

With this goal in mind, the round table features a group of three experts. They come from diverse entities/backgrounds and therefore will have complementary perspectives on the proposed points of discussion that will hopefully provide an overarching view on the topic to the audience.

**The invited panellists that will participate in the round table are:**



Mr. William Graves  
DHS



Mr. Patrick Grother  
NIST



Mr. Pedro Torres  
Youverse

The background is a light blue gradient with a network diagram of white dots and lines. Several hexagons are overlaid: a dark blue one in the top left with circuit-like lines, a dark blue one in the top right, a yellow one in the middle right, and two overlapping dark blue ones in the bottom right.

# **SPEAKERS**



**Agnes Diallo**  
**Executive Director, eu-LISA**

Agnès Diallo has over 20 years of experience supporting government-level institutions and private-sector organizations in France and across Europe in the areas of digital identity, data protection, security, as well as business transformation.

Before joining eu-LISA in 2023, as an Executive Vice-President and a member of the Executive Committee at IN Groupe - a European leader in digital identity solutions -, she was in charge of the Group Business, Performance and Strategy (2021-2023), and Digital Identity and Services (2019-2021). Agnès has also held a number of senior management positions with global IT company ATOS and was an Associate Principal with McKinsey & Company for over 10 years.

She holds a degree in Political Science from the Institut d'Études Politiques de Paris, a master's degree in Business Administration from Essec Business School and a master's degree in Public Administration from Harvard University.



**Giulio Mancini**  
**Policy Officer, DGHOME.F2**

Giulio is a Policy Officer coordinating the EU border management innovation policy, in the Directorate-General Migration and Home Affairs of the European Commission. Previously he was Programme Manager for the European Union Asylum, Migration and Integration Fund. Before the European Commission, Giulio worked in the engineering programme of the Centre on Global Security and Cooperation of Sandia National Laboratories in the United States; and as Programme Manager on Science and Technology for Non-Proliferation in the non-governmental sector in Italy. He has a PhD in Peace Studies from the University of Bradford in the UK.





**William Graves**  
**Deputy Assistant Director, DHS**  
**Office of Biometric Identity Management (OBIM)**

William Graves is the Deputy Assistant Director Futures Identity of the Office of Biometric Identity Management (OBIM) for the Department of Homeland Security (DHS). OBIM is the lead entity in DHS for biometric identity management services. Mr. Graves' responsibilities include aligning technology development within OBIM to strategic direction and growth objectives, supporting DHS strategies affecting identity operations, and integrating capabilities into existing systems.

Previously, Mr. Graves served as the Chief Engineer for Project Management Department of Defense Biometrics, where he acted as technical lead across the program's multiple matching and collection systems. In this role, Mr. Graves was responsible for Science and Technology with multiple Small Business Innovation Research and internally funded projects. Additionally, he created and ran the Biometric Interoperability Conformance Office to test biometric equipment for conformance to the DoD Electronic Biometric Transmission Specification to ensure products are interoperable across the DoD Enterprise.

Prior to PM DoD Biometrics, Mr. Graves served as the Chief Biometric Engineer at the DHS US-VISIT Program where he was responsible for biometric standards development, technical assistance to foreign countries, and innovation. In this role, he served as chair of the INCITS M1.6 Task Group on Cross-Jurisdictional and Societal Issues, represented the United States at the ISO/IEC SC37 Biometrics meetings, and represented US-VISIT's interests as an active member of the National Science and Technology Council's Subcommittee on Biometrics and Identity Management.



He also created the National Information Exchange Model Biometric Domain and managed it under US-VISIT stewardship. Mr. Graves was responsible for national and international biometrics data sharing projects, budget formulation and execution, information systems security, data architecture, and data management. Prior to working for the Government, Mr. Graves worked for Pacific Bell Telephone Company as a systems manager and database administrator, and was in the California National Guard and 82nd Airborne where he was deployed to the Los Angeles riots in 1992 and Operation Desert Storm.

Mr. Graves received a Bachelor of Arts in Economics from George Mason University and a Master of Information Technology from the American InterContinental University. He has received a Master Certificate in Project Management from George Washington University and a CIO Certificate from Carnegie Mellon University. Additionally, he is a DAWIA Certified Level III Program Manager, a Certified Biometrics Security Engineer, recipient of the FCW Fed100 in 2018 and C5ISR Top Ten Personnel of the Year in 2019. Mr. Graves is also an Adjunct Professor at George Mason University where he teaches Policy, Law, Ethics, and Privacy of Identity Analysis.



**Homeland  
Security**



**Patrick Grother**  
**Scientist at the National Institute of**  
**Standards in Technology (NIST)**

Patrick Grother is a scientist at the National Institute of Standards in Technology responsible for biometric algorithm evaluation, and biometric performance testing standardization. He leads the Face Recognition and Analysis Technology Evaluations. His current research interests include biometric failure analysis, image quality, demographic effects, and scalability.

He co-chairs NIST's biannual International Face Performance Conference (IFPC) on measurement, metrics, and certification. He assists several US Government agencies in biometrics performance assessment and standardization. Since 2018, he has served as the chairman of the ISO/IEC/JTC 1 Subcommittee 37 on Biometrics where he has edited six performance testing and data interchange standards. He received the IEC 1906 Award in 2009, the ANSI Lohse IT Medal in 2013, and U.S. Department of Commerce Gold Medals in 2007, 2012 and 2021.



**Pedro Torres**  
**Co-founder of Youverse**

With many years of experience in technology, innovation and product design, from large telco companies to medium-size companies and start-ups, and a strong research background, Pedro Torres has worked for the last seven years in global executive positions in customer experiences based on biometrics to enable immersive and seamless journeys.

A strong believer in decentralised self-sovereign approaches to privacy, Pedro has been leading efforts to provide the necessary protection and control to users as they authenticate for convenience with their face in multiple services such as proving identity to create a bank account, automatically checking-in to hotels, picking up car rentals or pay for goods and use loyalty in a fully contactless on-the-move fashion. Pedro has co-founded Youverse to disrupt the world of private authentication.





**Amina Bassit**  
**Marie Skłodowska-Curie Early Stage**  
**Researcher and PhD Candidate at**  
**University of Twente**

Amina Bassit has a background in discrete mathematics and cryptography and is about to defend her Ph.D. thesis as part of the PriMa (Privacy Matters) project, where she investigated the different facets of leveraging homomorphic encryption technology and the adaptation of biometric comparators to efficiently and accurately protect biometric data during its entire lifecycle when performing a recognition task (e.g., verification or search). She demonstrated that searching over one million homomorphically encrypted biometric records can be significantly faster than the state-of-the-art. Her thesis led to the submission of three patent applications, one of which Mobai, a Norwegian spin-off company, is using.



**Christian Rathgeb**  
**Senior Researcher at Darmstadt**  
**University of Applied Sciences**

Christian Rathgeb is a Professor with the Faculty of Computer Science, Hochschule Darmstadt, Germany. He is a Principal Investigator in the National Research Center for Applied Cybersecurity (ATHENE) and a Program Chair of the International Conference of the Biometrics Special Interest Group (BIOSIG).

His research interests include biometrics, iris and face recognition, and privacy-enhancing technologies.

He is a Senior Expert for Data Science & Biometrics in the Division Homeland Security of secunet Security Networks AG.





**Dimitris Karageorgiou**  
**Centre for Research and Technology**  
**Hellas (CERTH)**

Dimitris Karageorgiou is a researcher in the Media Analysis, Verification and Retrieval Group of the Centre for Research and Technology Hellas (CERTH). His research interests span the areas of multimedia forensics, content retrieval, artificial intelligence, and distributed software architectures. He actively participates in European research projects aiming at the development and exploitation of AI tools for countering Online Disinformation.

Also, he currently leads the R&D process of the Image Verification Assistant and Near-Duplicate Detection services. In the recent years, he has developed innovative methods in the field of multimedia forensics and has led the design of large-scale software architectures.



**Eleni Ktonia**

**Quality Manager and Document expert |**  
**Forensic Support | European**  
**Cybercrime Centre (EC3) | Europol**

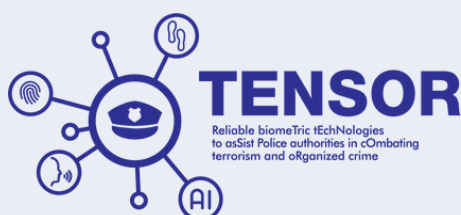
Eleni has been engaged since 2006 as a Document Examiner and Quality Manager, specializing in the examination of physical documents and currency and Quality Management Systems. She has been involved in ventures concerning digitalization of identity documents, biometrics, and quality management systems. In 2016 she moved to Europol Forensic Laboratory focusing on the digitalization of documents, biometric applications, and implementation of Quality Management Systems (ISO 9001:2008, ISO 17020:2012, ISO 17025:2005), internal control, and risk management. Eleni recently focuses on presentation attacks at the biometric capture systems leveraging insights from academia, private industry, and the research community and identifying solutions for the Forensic area against emerging criminal activities. Additionally, she is acting as an advisor in projects linked with biometrics modalities.





**Eleni Veroni**  
**Research & Innovation Project Manager**  
**at Netcompany-Intrasoft SA**

Eleni Veroni received her BSc degree in digital systems in 2013 and her MSc degree in digital systems security in 2015, both from the University of Piraeus, Greece. Since 2015, she has served as a Research Associate with the Systems Security Laboratory within the same university, actively participating in numerous EU-funded R&D projects in the domain of cybersecurity. Currently, she is a Research & Innovation Project Manager at Netcompany-Intrasoft SA, involved mainly in projects related to civil security for society and border management.



**Georgios Stavropoulos**  
**Information Management Unit, Institute**  
**of Communication and Computer**  
**Systems, National Technical University of**  
**Athens**

Mr. Georgios Stavropoulos received the Diploma degree in Electrical and Computer Engineering from the Aristotle University of Thessaloniki, in 2006. He is a research associate with CERTH/ITI.

His main research interests include signal processing, computer vision, machine learning, visual analytics, text mining, NLP and more. Since 2006, he has been involved in numerous European and National projects, under various positions. He is an expert developer, in various programming languages, and has developed applications and algorithms for text processing, biometrics, image analysis and more. His involvement with these research areas has led to the (co-)authoring of over 35 articles in refereed journals and international conferences.







**Gian Luca Marcialis**  
**University of Cagliari**

Gian Luca Marcialis is an associate professor of computer engineering at the University of Cagliari (Italy). He is the founder and leader of the PRA Lab's Biometric Unit, which oversees national, international, and company-sponsored projects. Among others, the Bullybuster project has been included in the top 100 global list of projects solving problems related to the 17 United Nations Sustainable Development Goals by the International Research Center on Artificial Intelligence under the auspices of UNESCO (IRCAI). Prof. Marcialis is chair of the eight editions of the International Fingerprint Liveness Detection Competition (LivDet), which received a certification of appreciation in the 2019 edition of the International Joint Conference on Biometrics.



**Giuseppe Vella**  
**Palermo University, Engineering**  
**Ingegneria Informatica S.p.A.**

Giuseppe Vella is a teacher of Foreign Languages at the Palermo University and a User Interface Designer in Engineering Research and Development Laboratory. He has a Master's degree in Digital Publishing for Internet from a ICT Training school of Ferentino. He is head of Border Management and Defence research unit in Engineering Ingegneria Informatica S.p.A. His main expertise and competences came from several Italian Ministry and EC co-funded projects, such as VINCENTE, MARISA, ANDROMEDA, and EFFECTOR. He is currently the coordinator of the FLEXI-cross and AgriBIT projects and he is involved in the iFlows, EO4EU, SEANICE, OVERWATCH projects.

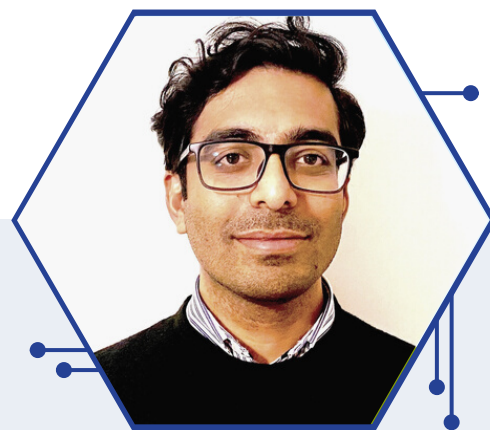




**Ioannis Sarridis**  
**Harokopio University of Athens,**  
**Centre of Research and Technology**  
**Hellas, Thessaloniki**

Ioannis Sarridis received both his bachelor's and master's degrees from the Department of Informatics at Aristotle University of Thessaloniki, Thessaloniki, Greece, in 2018 and 2020, respectively. He is currently pursuing Ph.D. degree at Harokopio University of Athens and is a Research Associate with the Centre for Research and Technology Hellas, Thessaloniki, Greece. His research interests include AI fairness, computer vision, deep learning, and hypergraph learning.

**MAMMOth**



**Kiran Raja**  
**Norwegian University of Science and**  
**Technology**

Kiran Raja received the Ph.D. degree in computer Science from the Norwegian University of Science and Technology, Norway, in 2016. He is Faculty Member with the Department of Computer Science at NTNU, Norway. He was/is participating in EU projects SOTAMD, iMARS, and other national projects. He is a member of European Association of Biometrics (EAB), chairs Academic Special Interest Group at EAB and is a senior member of IEEE. He serves as a program co-chair of BIOSIG. He is also a member of the editorial board for various journals.

**iMARS**  
image manipulation attack  
resolving solutions



**Luyi Sun**  
**Researcher at PriMa | Norwegian**  
**University of Science and Technology**

Luyi Sun received her B.S. degree from Huazhong University of Science and Technology, Wuhan, China in 2019. She took part in the joint program between Huazhong University of Science and Technology and KTH Royal Institute of Technology in 2018 and received the M.S. degree at KTH Royal Institute of Technology, Stockholm, Sweden in 2020. After that, she joined the PriMa (Privacy Matters) -ITN under EU-Horizon-2020 Framework and was admitted to the Department of Information Security and Communication Technology at the Norwegian University of Science and Technology. Her research interests include data protection and privacy, information security, and machine learning.



**Marta Gomez-Barrero**  
**Hochschule Ansbach**

Marta Gomez-Barrero is a Research Professor for IT-Security at the Hochschule Ansbach, Germany. She is general chair of the BIOSIG conference, Co-Chair of the EAB Academic SIG, associate editor for the EURASIP Journals on Information Security and on Image and Video Processing, Member of the IARP TC4 Conference Committee and the IEEE Biometrics Council Security and Privacy Technical Committee, and represents the German Institute for Standardisation (DIN) in ISO/IEC SC37 JTC1 SC37 on biometrics. She has co-authored more than 90 publications in the field of biometrics, and her current research focuses on security and privacy evaluations of biometric systems.





**Martin Drahansky**  
**Research Leader at Touchless**  
**Biometric Systems**

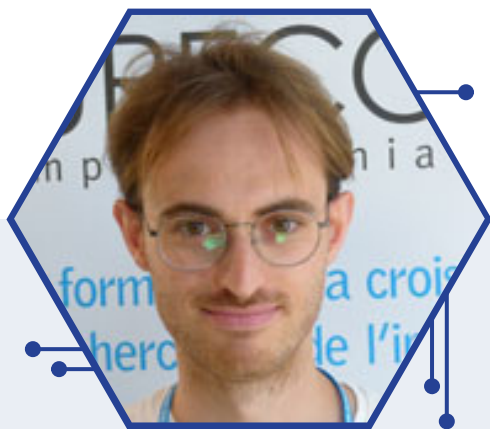
Martin Drahansky started the biometric career in 1999 with fingerprint recognition topic. He finished his university studies in Czech Republic and Germany in IT and electro specializations in 2001, defended Ph.D. thesis in 2005. In 2017 he was promoted to a university professor. Till now he is an experienced researcher in biometrics and is the research leader in the company Touchless Biometric Systems. You can find more information on his private web page [www.drahansky.cz](http://www.drahansky.cz).



**Massimiliano Todisco**  
**EURECOM**

Massimiliano Todisco is a professor at EURECOM, France. He received his Ph.D. degree from the University of Rome Tor Vergata in 2012. Currently, he is serving as principal investigator and coordinator for TReSPAsS-ETN, a H2020 MSCA ITN and RESPECT, a project funded by the French ANR and the German DFG. He co-organizes the ASVspooF and VoicePrivacy challenge series. He has co-authored more than 100 publications. His current interests are in developing explainable DNN architectures for speech processing and speaker recognition, fake audio detection, and the development of privacy preservation algorithms to prevent disclosure of sensitive data.





**Michele Panariello**  
**EURECOM**

Michele Panariello is currently a PhD student at the Digital Security department of EURECOM (Sophia Antipolis, France) under the supervision of Professor Nicholas Evans. His work concerns the topic of speech processing for privacy preservation.



**Nathan Ramoly**  
**IDnow**

Nathan Ramoly obtained a PhD in Computer Science at Université Paris-Saclay (Télécom SudParis) in 2018. In his career, he has been focusing on AI in various applications, ranging from robotics in uncertain contexts to, noticeably, Presentation Attack Detection. He is currently a Research Scientist at IDnow as part of the biometric research team.







**Oubaïda Chouchane**  
**EURECOM**

As a Ph.D. researcher at EURECOM's digital security group in France, Oubaïda specializes in voice biometrics, privacy preservation, and ethical aspects of AI. With a background in electronics, she has made a challenging yet rewarding transition to machine learning, focusing on safeguarding sensitive biometric data and ensuring fairness in automated systems. Her research has led to publications and contributions to the field. She has also engaged in extensive courses, trainings, and secondments across Europe, enriching her expertise in security, privacy, ethics, and leadership. Her supervisory duties at EURECOM reflect her commitment to mentoring the next generation of tech innovators.



**Pavlo Mozharovskyi**  
**Associate Professor at Telecom Paris**

Pavlo Mozharovskyi is an Associate Professor at Telecom Paris in the team of the Information Processing and Communication Laboratory (LTCl). After having finished his studies at Kyiv Polytechnic Institute in automation control and informatics, he obtained a PhD degree at the University of Cologne in 2014, where he conducted research in nonparametric and computational statistics and classification. He has been postdoctoral fellow of the Centre Henri Lebesgue at Agrocampus Ouest in Rennes for a year working on imputation of missing values, and then joined the CREST laboratory at the National School of Statistics and Information Analysis (ENSAI). His main research interests lie in the areas of explainable AI, machine learning, computational statistics, data depth, robust statistics, multivariate data analysis, functional data analysis, data envelopment analysis.





**Paweł Narolski**  
**IDENTT**

Paweł is the Head of Research and Development at IDENTT, and leads teams advancing the company portfolio of identity document recognition and biometric feature analysis systems used to enable secure, automated, and remote identity verification.

Paweł is responsible for:

- internal research on the presentation attack detection measures in biometric or identity document processing systems,
- development of new systems, such as Document Knowledge, structured information engine on over 300 identity document versions issued throughout the world, and
- improvement of deep learning-based products through the iterative development of the continual learning or data engineering processes.

Paweł is currently overseeing the work on the next-generation Liveness Detection system, which will be publicly available at the beginning of 2024.

**IDENTT®**



**Philippe Hercelin**  
**Innovation Program Manager in  
Global R&D at IDEMIA**

Philippe Hercelin graduated in software engineering from ISEP Paris. He has more than 30 years of experience in the field of real-time systems & critical infrastructure, identity, and security technologies. He is currently holding the position of Innovation Program Manager within the Global R&D of IDEMIA. He currently manages the European Project I3-Market and coordinates the French project LIMPID.





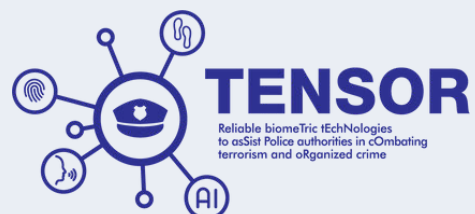
**Rachelle Sellung**  
**Fraunhofer IAO, Germany**

Rachelle Sellung is a Senior Scientist in the competence team of Identity Management at Fraunhofer IAO. Within this interdisciplinary team, she contributes a Socio-Economic and User Experience perspective for various topics within Identity Management, like SSI, Verifiable Credentials, Digital Wallets and Trust Management. She has been apart multiple EU projects (e.g. FutureID, LIGHTest, and mGov4EU), German National Projects (e.g. ONCE, TESTER, etc.), and Industry projects. In mGov4EU, she has a large contribution to the stakeholder research, sustainability, and transdisciplinary evaluation efforts for the project.



**Spyros Evangelatos**  
**Senior Research & Development**  
**expert for Netcompany-Intrasoft**

Spyridon Evangelatos received the M.Eng. degree in electronics and radio-communications, the M.Sc. degree in signal processing for telecommunications, the M.Sc. degree in control theory and the PhD in statistical physics and wireless communications from the National and Kapodistrian University of Athens (NKUA), in 2008, 2010, 2013 and 2017 respectively. He has served as a Research Fellow with the Self-Evolving Cognitive and Autonomic Networking Group and with the Physics of Information Laboratory, NKUA. He is currently a senior R&D expert for Netcompany-Intrasoft involved in several EU funded projects dealing with safety and security.





**Wojciech Wodo**  
**Biometrics and Cybersecurity**  
**Consultant at Identt Ltd.**

Wojciech Wodo is biometrics and cybersecurity consultant at Identt Ltd., responsible for strategic planning, field expert in R&D projects and board advisor. He obtained a PhD degree in the field of computer security. His areas of expertise are cybersecurity and computer security, especially in digital banking, electronic identity, and biometrics. Dr Wodo works also as an assistant professor at Wroclaw University of Science and Technology. He graduated from the Top 500 Innovators program at Haas School of Business UC Berkeley.

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# **ORGANISING COMMITTEE**





**Adithyan Nair**  
**European Association for**  
**Biometrics**

Adithyan Nair is a Masters student of International Relations in the University of Bologna. With a background in Bachelors in International Relations from the University of Warsaw, he has published several articles in academic journals and news portals about topics mainly revolving around regional political dynamics. He has worked as the Director of Digital content and Editor of Center for International Relations and International Security. Moreover, he has also worked as a writer and editor for the International Affairs Review and Organization for World Peace (OWP).

Adithyan Nair began his internship in August 2023, at the European Association for Biometrics (EAB).



**Bogumiła Soroka**  
**European Association for**  
**Biometrics**

Bogumiła Soroka is a Junior Policy & Project Manager at EAB. She is involved in Communication and Dissemination activities of the iMARS project, policy research, project proposal writing and organisation of various EAB events.

She received a Master's degree in International Security with concentrations in Intelligence and European Studies from Sciences Po Paris in 2023. Prior to that, she received a Bachelor's degree and Honours Diploma in International Relations from the University of Warsaw in 2020. Before her experience at EAB, she worked at Hozint - Horizon Threat Intelligence and The Hill Newspaper.



**Dinusha Frings**  
**European Association for**  
**Biometrics**

Dinusha Frings is Chief Executive Officer of the European Association for Biometrics (EAB). She leads the strategic and operational activities of EAB to support the biometrics and digital ID community, and is involved in several Horizon2020 projects.

Before joining EAB she coordinated multiple innovative projects on behalf of the Ministry of the Interior and Kingdom Relations of the Netherlands, such as State Of The Art of Morphing Detection (SOTAMD), Known Traveller Digital Identity and Research Live Enrolment. And has previously worked at IDEMIA in the Government Identity Solutions division, where she coordinated multiple IT projects related to secure ID documents. This is where she developed an interest in biometrics and ID.



**Fernando Alonso-Fernandez**  
**Halmstad University**

Fernando Alonso-Fernandez received the MSc/PhD degrees in telecommunications from Universidad Politecnica de Madrid, Spain. Since 2010, he is with the School of Information Technology (Halmstad University, Sweden) first as recipient of a Marie Curie IEF and a Post-Doctoral Fellowship from the Swedish Research Council, and later as recipient of a Project Research Grant for Junior Researchers of the Swedish Research Council. Since 2017, he is an Associate Professor at Halmstad University. He has been involved in multiple EU (e.g. FP6 Biosecure NoE and COST IC1106) and national projects (e.g. SIDUS-AIR, CAISR, Al.m. 2.0, MIDAS, DIFFUSE) focused on security and analysis of signals for biometric purposes. He has over 120 international contributions at refereed conferences and journals and has authored several book chapters. He co-chaired ICB2016, the 9th IAPR International Conference on Biometrics. In addition, he is Associate Editor of IEEE T-IFS and the IEEE Biometrics Council Newsletter, and an elected Member of the IEEE Information Forensics and Security Technical Committee.



**Javier Galbally**  
**eu-LISA**

Javier Galbally received the M.Sc. degree in Electrical Engineering from the Universidad de Cantabria, Spain, in 2005, and the Ph.D. degree in Computer Science and Electrical Engineering from the Universidad Autónoma de Madrid, Spain, in 2009, where he was an Assistant Professor until 2012. In 2013, he joined the European Commission at DG Joint Research Centre, where he worked for nine years as Scientific/Technical Officer. Since May 2022 he is a Senior Capability Building Officer at the European Agency eu-LISA. His research interests are mainly focused on the security and performance evaluation of biometric systems, pattern and biometric recognition. He is actively involved in different projects dealing with biometrics and their use in large scale IT systems. He is the Chair of the EAB Research Projects Conference since 2017. He has authored over 100 publications which have produced over 6000 citations, mainly focused on the biometrics field. Javier has received several awards and distinctions for the quality of his work.



**Marina Lazarova**  
**European Association for  
Biometrics**

Coming from Bulgaria, Marina is currently pursuing a bachelor's degree in International Communication and Media from Erasmus University Rotterdam. Fueled by a passion for intercultural communication and web design, Marina has enthusiastically embraced her role within the EAB as a Communications and Web Design Intern. With her diverse background, and curiosity for Biometrics, she hopes to be a valuable member of the EAB team.



**Phoebe Sirotin**  
**European Association for**  
**Biometrics**

Phoebe Sirotin is a Policy Intern at the EAB. She is involved in policy and legal research and assists with the organisation of EAB activities.

She recently received her LLM in Law & Technology in Europe from Utrecht University in 2023. She completed her bachelor's diploma in International Law at Tilburg University in 2022, where she also minored in economics and social sciences. Prior to working at EAB, she has worked at the student law publication 'Secjure' and has experience working in several communications roles.





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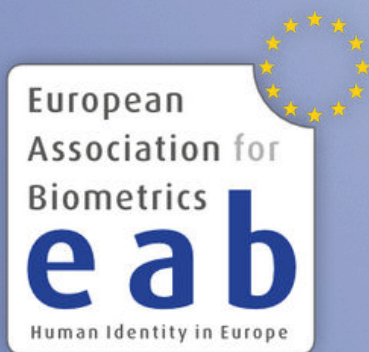


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# ABOUT EAB

*The leading voice for Biometrics and Digital ID, for Europe.*

The EAB is the leading voice for biometrics and digital identity, for Europe. As a non-profit organisation, EAB represents and connects a growing community of biometrics and digital ID stakeholders from across Europe. Our purpose is to foster innovation, support networking across markets and stakeholders, and provide trusted and impartial advice. The EAB's membership includes the European Commission, business leaders, governments, institutes and academia. Members meet regularly at EAB hosted and partnered events and networking opportunities, across Europe.

