THE INTERNATIONAL ASSOCIATION FOR PATTERN RECOGNITION

iapr.org

IAPR Newsletter

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Volume 48, Number 3, Jul 2026

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From the Editor's Desk

Breaking Through Career Roadblocks: The Women@ICPR 2026 Panel

Since 2016, the Women@ICPR initiative has made space at each ICPR conference for our community to gather and reflect on the experiences of women in pattern recognition. ICPR 2026 continues this tradition with a panel discussion, "Breaking Through Career Roadblocks," dedicated to the often invisible obstacles that women encounter over the course of their careers.

Pattern recognition remains heavily male-dominated in both academia and industry, and the challenges women face are frequently the kind that are not mentioned in job descriptions. To ground the conversation in lived experiences, the organizers invited the community to provide input ahead of the panel via a survey. Among responses, the difficulty of balancing research, teaching, service, and caregiving was cited more often than any other obstacle, followed by the scarcity of visible role models, the challenge of being nominated for leadership, and the everyday microaggressions of not being taken seriously.

Behind those themes are unsettling stories. A researcher recruited through a competitive interview recalled being asked, while pregnant, when she planned to have her third child. Another described being the first woman (and the first person) in her family to earn a PhD, navigating a path with no roadmap to follow. A third spoke of being addressed as "Miss" rather than "Doctor," long after earning the title. These are the quiet frustrations that can either build up resentment and bitterness, or resilience and a will to help the younger generation have a smoother sail. This is what the panel intends to further explore.

Our panel discussion session looks beyond diagnosis. The panel brings together voices from different career stages and geographic regions, and includes a male colleague who is a committed ally as a reminder that breaking through is a shared responsibility, not a burden for women alone. The questions are drawn directly from what the community said it wanted to discuss, moving from personal experience toward allyship, mentorship, and, above all, the networks we can build ourselves. Systemic change is slow; a community is something we can nurture today.

Whether you have faced such roadblocks yourself or simply want to help dismantle them, you are warmly invited! Wednesday, August 19, features the Maria Petrou

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...From the Editor's Desk, continued. from page 1

Prize Lecture in the morning, reserved Women@ICPR networking areas during the coffee and lunch breaks, and the Women at ICPR Panel at 14:00. The panel will be moderated by Alexandra Branzan Albu, with panelists Apostolos Antonacopoulos, Sara Atito Ali Ahmed, Alicia Fornés, and Momina Moetesum. We hope you will join us.

~Alexandra Branzan Albu, on behalf of the Women4PR Chairs

Calls For Papers

For the most up-to-date information on IAPR-supported conferences, workshops and summer/winter schools, visit www.iapr.org/conferences

Conferences, Dates, & Locations	2026	Calls and Deadlines in order from earliest **paper deadline** (other deadlines vary in order)
CVIP 2026 Dec 9-12, 2026 Calicut, India	11th International Conference on Computer Vision and Image Processing	**Papers (Round 2):** Jul 31, 2026

2027

ICPRS 2027 Mar 8-11, 2027 Talence (Bordeaux), France	16th International Conference on Pattern Recognition Systems	**Papers:** Oct 25, 2026
SCIA 2027 Jun 8-11, 2027 Gjovik, Norway	Scandinavian Conference on Image Analysis	**Papers:** Jan 26, 2027
IJCB 2027 Sep 13-17, 2027 Foz do Iguacu, Brazil	2027 IEEE/IAPR International Joint Conference on Biometrics	**Papers:** Apr 10, 2027
ICPRv 2027 Oct 4-6 & 14-15, 2027 Online	International Conference on Pattern Recognition Virtual	**Papers:** Mar 1, 2027

Have you faced hurdles in your career as a woman in pattern recognition?

You're not alone.

Join us for a panel discussion you'll find honest, inspiring, and empowering.

IAPR WOMEN

Women @ ICPR 2026: Breaking Through Career Roadblocks

The Women@ICPR 2026 panel is a continuation of initiatives for women at ICPRs that started in 2016. This discussion will focus on the invisible obstacles that women are facing in their careers and strategies to overcome them. We hope you'll attend: August 19, 2026 at 14:00.

Women readers: Whether or not you can be there, please use the anonymous survey linked to this QR code to tell us about the gender-related hurdles you've faced and how you got past them. **Please respond before Aug 19, 2026.**

ICPRv2027

October 4, 5, 6 and 14, 15, 2027 https://iapr.org/icpr-2027/

the inaugural INTERNATIONAL CONFERENCE ON PATTERN RECOGNITION (Virtual)

CALL FOR PAPERS

The **International Conference on Pattern Recognition Virtual (ICPRv)** is the virtual extension of the flagship physical conference of the International Association for Pattern Recognition, the 29th edition of ICPR. Like its physical counterpart, this fully virtual conference encompasses a wide range of topics where Pattern Recognition methods are applied in fields including Computer Vision, Machine Learning, Image Processing, Speech and Natural Language Processing, and Sensor Pattern Processing.

The Inaugural ICPRv, to be held in 2027, offers an excellent platform for students, academics, and industry researchers to foster new ideas and collaborations. Unlike the face-to-face ICPR conferences, ICPRv will not have tracks and plenary sessions. Instead, all papers will be presented in two-hour thematic sessions of papers on the same topic. This will create sessions with a more focussed and specialized workshop-like feel, with opportunities for discussion and interaction with the authors. Authors will identify their preferred thematic session topic when they submit their paper. Delegates can attend any and all of the live thematic sessions, which will also be recorded for the benefit of delegates wanting to attend simultaneous sessions or sessions at inconvenient times.

Along with traditional ICPR conference topics listed at the end of this CFP, we encourage papers on truly novel research problems. Examples include (but are not restricted to):

1. **Universal Neuro-Symbolic Knowledge Engines:** Foundation models still hallucinate and update knowledge poorly. New architectures should fuse LLMs with dynamic knowledge graphs to absorb rich documents, update world models without retraining, and enable provable reasoning over evolving scientific and enterprise data.
2. **Omnimodal Embodied World Models:** Current research still treats vision, audio, and text separately. The next step is to build omnimodal world models that integrate physics and asynchronous IoT signals, enabling robots to understand real-world causal rules and transfer smoothly from simulation to deployment.
3. **Continuous-Time Fluid Architectures:** Efficient AI still relies on discrete tokens and batching. The next frontier is continuous, asynchronous architectures that adapt compute to signal entropy, using little energy for simple data and deeper reasoning only for anomalies or complex patterns.
4. **Mechanistic Fairness and Provable Unlearning:** Current trustworthy AI methods remain largely post-hoc. The next step is to combine mechanistic interpretability and algorithmic fairness so models can isolate and remove specific biases or sensitive content, with provable guarantees of privacy and fairness for critical domains such as law and medicine.
5. **Adversarial Co-Evolutionary Data Ecosystems:** As generative AI advances, the generator–detector arms race is becoming unsustainable. A next step is closed-loop ecosystems where generators and forensic models co-evolve during training, embedding cryptographic provenance and robust invisible watermarks directly into generated outputs.
6. **Causal Discovery Foundation Models:** Causal discovery remains an emerging field. The next leap is foundation models that can design experiments, intervene in simulations, and infer causal equations from observational data, moving beyond prediction to uncover the physical or economic laws governing a system.
7. **Hyper-Personalized Cognitive Digital Twins:** Personalized systems remain separate from advanced LLM reasoning. The next step is privacy-preserving, edge-based cognitive twins that learn a user's physiological, emotional, and behavioral patterns, anticipate complex needs, and keep sensitive biometric and behavioral data strictly on-device.

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ICPRv2027

October 4, 5, 6 and 14, 15, 2027 https://iapr.org/icpr-2027/

CALL FOR PAPERS, continued from previous page

Important dates and deadlines

(note these dates are tentative and might be adjusted closer to the conference):

- Paper submission deadline: March 1, 2027
- Reviews to authors: April 9, 2027
- Author rebuttal (optional): April 16, 2027
- Author notification: May 24, 2027
- Camera-ready submission: June 7, 2027
- Conference website open for delegate viewing: September 27, 2027
- Conference: October 4, 5, 6 and 14, 15, 2027 (Times will be announced later)

Submission and Review

ICPRv-2027 will follow a single-blind review process. Authors MUST include their names and affiliations in the manuscript.

Paper Format and Length

Two types of papers are accepted: short (8 pages) and long (15 pages). Short papers are intended for preliminary results and will not be included in the proceedings published by Springer. The format is Springer's LNCS style layout. Paper templates will be provided on the submission webpage.

We look forward to your participation in ICPRv 2027

Contact: icpr27pc@iapr.org
General Chairs: Robert Fisher, Tin Kam Ho, Larry O'Gorman, Lale Akarun
Program Chairs: Adel M. Alimi, David Doermann, Albert Ali Salah, Terrence Sim, Vitomir Struc, Guoying Zhao

In addition to the novel research areas described on page 3, ICPRv continues to welcome traditional ICPR topics as listed below:

3D vision
Action, behavior, and event recognition
Affective computing
Audio and speech processing
Autonomous driving
Bioinformatics
Biological vision models
Biometrics and forensics
Clustering and statistical models
Computational imaging
Computer aided diagnostics
Computer analysis of human behavior (inc. face, body, pose, gestures, etc.)
Computer graphics
Computer vision for robotics and autonomous driving
Datasets and evaluation
Deep learning
Document analysis and understanding
Efficient and scalable AI
Embodied vision
Event-based cameras
Explainability and interpretability in pattern recognition
Few-shot and zero-shot learning
Generative models
Graph-based and Bayesian models
Human Computer Interaction
Image analysis and recognition
Image and video processing
Image and video synthesis and generation
Image detection and segmentation
Large Language Models (LLMs) and Vision Language Models (VLMs)
Low-level vision
Machine learning (inc. supervised, unsupervised, semi- and weakly-supervised, etc.)
Medical and biomedical imaging, cell microscopy
Motion and video analysis
Multimodal and multi-label learning
Natural language processing (NLP)
Neural networks
Object detection and recognition
Online, continual, and active learning
Optimization methods
Photogrammetry and remote sensing
Physics-based vision and shape-from-X
Representation learning
Scene analysis and understanding
Social signal processing
Text detection and recognition
Theory of computer vision and pattern recognition
Transfer learning
Transparency, fairness, accountability, privacy, ethics
Vision applications and systems
Vision, language, and reasoning

ICPR 2026 News

International Conference on Pattern Recognition LYON

The 28TH INTERNATIONAL CONFERENCE ON PATTERN RECOGNITION

Lyon, France, August 17- 22, 2026, International Convention Center

KEYNOTE SPEAKERS

Henrik I. Christensen
Contextual Robotics Institute
UC San Diego
La Jolla, CA, USA
Building a Perception Stack for Autonomous Driving

Alicia Fornés
Universitat Autònoma de Barcelona
Spain
Challenges in Handwriting Recognition: The Case of Historical Texts, Music Scores and Ciphers

Cuntai Guan
Nanyang Technological University
Singapore
Building a Foundation Model for EEG-based Brain-Computer Interfaces

Zhu Jun
Tsinghua University
Beijing, China
Towards Building General World Models

CONGRATULATIONS IAPR PRIZE WINNERS

Join these brilliant researchers for their Prize Lectures at ICPR 2026

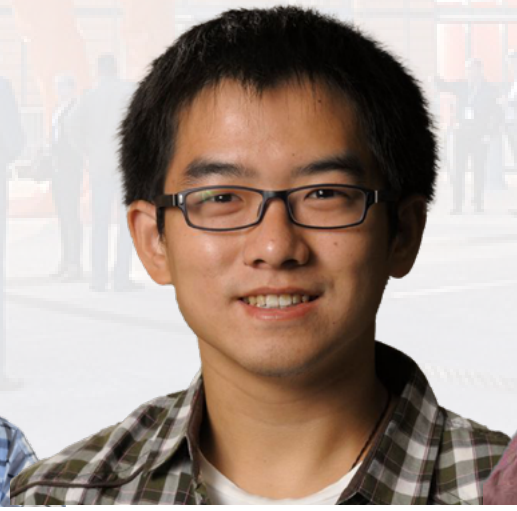
The 2026 King-Sun Fu Prize

Jiří Matas
Czech Technical University
Prague, Czechia
For seminal contributions to evidence aggregation in geometric computer vision

Lecture: August 17, 9:30 am

The 2026 J. K. Aggarwal Prize

Zhangyang "Atlas" Wang
University of Texas at Austin, USA
For contributions to the efficient training and deployment of generative models with applications to language and vision



Lecture: August 18, 9:30 am

The 2026 Maria Petrou Prize

Sanghamitra Bandopadhyay
Indian Statistical Institute
Kolkata, India
For pioneering contributions to pattern recognition, evolutionary computing and computational biology, and as a role model for young researchers

Lecture: August 19, 9:30 am

ICPR 2026 LYON News

International Conference on Pattern Recognition

The 28TH INTERNATIONAL CONFERENCE ON PATTERN RECOGNITION

Lyon, France, August 17- 22, 2026, International Convention Center

TUTORIALS

All Tutorials will take place on Friday, August 21

T1 Graph-based Models for Video Data Analysis from Various Sensors

This tutorial provides theoretical insights and practical methods for applying graph-based models to process video data from a variety of sensors (e.g. normal, egocentric, and moving cameras), and demonstrates the roles of GNNs (deep learning on graphs) and graph signal processing in solving video analysis problems.

T2 Advancing Comprehensive Reasoning in Multimodal Large Language Models

This is a comprehensive overview of reasoning capabilities in Multimodal Large Language Models (MLLMs), focusing on the transition from basic perception to complex inference. We explore how multimodal reasoning differs from text-only reasoning, challenges specific to visual reasoning, and recent advances inspired by reasoning-focused LLMs. We aim to bridge the gap between theoretical foundations and practical implementations, offering insights into current capabilities and future research.

T3 Reliable Industrial AI

This tutorial Introduces the emerging paradigm of Reliable Industrial AI, which integrates:

- Multimodal perception (vision, speech, language)
- Agentic LLM design (agent pipelines, orchestration, evaluation)
- From Chatbot to Coding Agent

We emphasize lessons learned from real-world deployments, highlighting the gap between research prototypes and production systems.

T4 Robot Learning with Embodied Vision: From Perception to Action

Traditional robotic systems with primarily visual interfaces often fail to adapt to unstructured real-world environments. Robot learning—integrating deep learning, reinforcement learning, and imitation learning—offers a transformative paradigm, enabling robots to acquire skills directly from data and close the loop from visual perception to physical action. This half-day tutorial is a comprehensive introduction to this rapidly evolving field, including core principles, applications across a variety of robot types, comparative visualizations and rich video demonstrations from both simulation and real-world deployments.

T5 An Introduction to the Formal Verification of Neural Networks

This tutorial introduces the application of formal verification techniques to neural networks. After exploring why formal methods are a crucial step towards AI systems' safety, formal properties such as robustness and functional properties will be introduced with an industrial example (ACAS-XU). Emphasis will be on the steps of the formal verification: definition of the properties, translation to a specification language, and its effective verification. State-of-the-art verification tools will be introduced, followed by a practical session with PyRAT. We will conclude with open research questions regarding efficient formal verification.

T6 Counterfactual Explanations of AI Systems: Fundamentals, Methods, & User Studies for XAI

This tutorial aims to build connections among pattern recognition, eXplainable AI (XAI), and psychology with a focus on counterfactual explanation strategies, with interactive hands-on sessions on theoretical foundations, modeling approaches, and both computational and psychological evaluation methodologies to help attendees understand how to use counterfactuals for XAI. This program targets pattern recognition researchers, machine learning practitioners, PhD students, and advanced graduate students who have little-to-no background in XAI and/or running user studies.

T7 Agentic Document Intelligence: From Prototype to Production with Trustworthy AI Agents

This is a practical and research-oriented introduction to Agentic Document Intelligence, with a dual focus on (i) how modern document AI systems are architected using multimodal foundation models and agentic reasoning, and (ii) how to make these systems trustworthy in real-world deployment. The program is accessible to ICPR participants with backgrounds in document analysis, computer vision, or NLP, while also offering depth for researchers and engineers actively working in this space.

Questions? Click here or Contact the Tutorial Co-Chairs at tutorials@icpr2026.org

The 28TH INTERNATIONAL CONFERENCE ON PATTERN RECOGNITION

Lyon, France, August 17- 22, 2026, International Convention Center

WORKSHOPS

Below is an UPDATED list of workshops that will take place on August 21 & 22.
Click here for complete workshop details, including website links, schedule, and brief descriptions. Websites are also linked to each acronym below.

Endorsed by IAPR | Sponsored by IAPR

BRAIN	Behavioral Robotics and AI for iNdustrial and social systems
PRRS	Workshop on Pattern Recognition in Remote Sensing
MVI2	Machine Vision for Industrial Inspection
AIHA	Fourth International Workshop on Artificial Intelligence for Healthcare Applications
PRESTIGE	Pattern Recognition and Computer Vision for e-Heritage and Digital Humanities Workshop
PRHA	4th International Workshop on Pattern Recognition in Healthcare Analytics and Bioinformatics
V3SC 2026-3	3rd Int. Workshop on Video Surveillance Systems in Smart Cities: Aerial Monitoring and Synthetic Data
PIDM4HCPS	Perception, Interaction and Decision-Making for Human Cyber-Physical Systems
BIOMAP	BIO-inspired Methods for Pattern Recognition
FMVA	Foundation Models for Vision Applications
PAVER	PAVER: Workshop on Physics-Aware Video gEneration and Restoration
ETTAC	2nd International Workshop on Eye Tracking Techniques, Applications and Challenges
MCMI	2nd International Workshop on Multi- and Cross-Modal Information for Enhanced Pattern Recognition
XAIE4	4th Workshop on Explainable and Ethical AI
TrustDoc	Trustworthy Document Understanding: Privacy, Unlearning, Robustness, and Explainability
CVBMC	Computer Vision for Biodiversity Monitoring and Conservation
MPRSS	Multimodal pattern recognition for social signal processing in human computer interaction
AUSTech 2.0	Advances in Underwater Surveillance: Technologies, Challenges, and Future Directions
TIPS	Workshop on Textual Information Processing & Synthesis in the Wild
RRPR	Reproducible Research in Pattern Recognition
MANPU	International Workshop on coMics ANalysis, Processing and Understanding
GREEN-PR	Sustainable PR & PR for Environment
IMTAX	Image Mining. Theory and Applications

Calls from IAPR Committees

From the Ad Hoc 50th Anniversary Committee: A Call for Your Memories

Nearly 50 years ago (1978), the IAPR officially began life as a non-profit, world-wide, supportive organization for pattern recognition researchers. At ICPR 2028, we plan to celebrate this milestone for our community, recognize our successes, and begin the next 50 years with an even stronger sense of identity and purpose.

At the bottom of page 10, after the *From the ExCo* essay, you can read about a project to produce a commemorative 50th Anniversary book. We are eager to collect materials not only to preserve the history of IAPR, but to incorporate them into the book, where possible, and acknowledge the contributions of the many individuals who helped make the IAPR what it is today. ***Please make it a priority to share your memories from IAPR's long history with us now by emailing*** 50th@iapr.org. Quality photos of identified people from ICPR events are needed!

Please also consider donating to the book project.

From the IAPR Industrial Liaison Committee

Call for Students Seeking Internship Opportunities
and for
Companies with Internships Available
to contribute to the
Internship Listings on the
IAPR Internship Brokerage Page

The IAPR-ILC wishes to promote opportunities for students to undertake internships at companies working in Pattern Recognition, AI, Computer Vision, Data Mining, Machine Learning, etc. We do this through a web-based internship listing service. Companies can list their internship opportunities, and students can browse the listings and contact the company.

For Students

If you are seeking an internship, please click on the underlined call title above (or here) to find a list of companies offering internships, with locations (some remote), requirements, etc.

For Companies with Internships Available

Please email your listings as follows:
To: webmaster@iapr.org
Subject: IAPR internships, listing

1. Details:
2. Host:
3. Location:
4. Post Type:
5. Specialty:
6. Funded:
7. Length:
8. Degree & Visa Requirements:
9. Internship start date:
10. Application closing date:
11. Details:
12. Contact:

Click on call title (link) above for examples

From the IAPR Executive Committee (ExCo)

Call for Proposals for Summer/Winter Schools

Summer/winter schools are training activities that expose students and junior students to the latest trends and techniques in a particular pattern recognition field.

To be eligible for a grant, the organizers must work through at least one of the IAPR's Technical Committees as they develop and present the proposal.

How to Submit: Proposals for IAPR-supported summer schools should be submitted by email, ***at least four months in advance of the start of the school***.

Send proposals to Executive IAPR Secretariat Linda O'Gorman (exec-secretariat@iapr.org). A PDF attachment containing all the required information is appreciated.

For detailed guidelines, see the Proposal Requirements described in the ExCo Initiative on Summer Schools.

From the ExCo...

The IAPR Executive Committee is Pleased to Announce the Inaugural Recipients of the IAPR Distinguished Service Award

News Briefs From the IAPR ExCo

At ICPR2026 in Lyon, the Governing Board will appoint a new ExCo for the term 2026-2028, and the term of the current ExCo will end in August 2026. We take this opportunity to express our sincere gratitude to the entire IAPR community for its engagement, support, and valuable contributions to the field over the years. We look forward to seeing many of you in Lyon, and encourage all members to take an active role in IAPR by contributing to leadership, committees, events, and membership growth through national societies.

The 28th International Conference on Pattern Recognition (ICPR 2026) will be held soon in Lyon, France, from August 17 to 22, 2026. The organizing committee is working hard arranging the last details. Visit the ICPR 2026 website to consult the scientific program, workshops, tutorials and all the details of the event.

The inaugural winners of the IAPR Distinguished Service Award are announced in the *From the ExCo* Essay (right), and other IAPR Prize recipients are announced on page 5 of this issue. Congratulations to the award winners and a huge thank you to the Prize Committees for their dedication and hard work.

The ExCo is preparing for the biennial Governing Board meeting. It will take place on Tuesday, August 18, in the ICPR 2026 venue. Some of the main points of the agenda will be the President's report; follow up reports of the Technical Committees and Standing Committees; ballot of ICPR 2030 bids; and election of new officers. The ExCo also wants to encourage leadership and recruit new members to national societies.

50th Anniversary of IAPR: Special celebratory activities will be held during ICPR 2026. In particular, the ExCo is promoting the publication of a commemorative book that will reflect on the history of pattern recognition and explore emerging trends and future directions in the field. Read more about this exciting project in this issue, linked here.

ICPRv - The IAPR is pleased to announce its inaugural Virtual International Conference on Pattern Recognition. ICPRv 2027 will be held online, October 4–6 and 14–15, 2027. This first virtual edition of ICPR will take place between the flagship in-person conferences ICPR 2026 in Lyon, France, and ICPR 2028 in Sydney, Australia. Papers will follow the same length, rigorous review process, and quality standards as in-person ICPRs, with an anticipated acceptance of around 500 papers, to be published by Springer. The virtual format will provide an inclusive and accessible opportunity for the global pattern recognition community to engage, present, and collaborate. Details available in this issue (pages 3 & 4) and at the ICPRv website (in development).

At ICPR 2026 (Lyon, France), the IAPR will begin a tradition of conferring the prestigious **IAPR Distinguished Service Award**. Multiple winners were named this year because this is a new award. Eventually, we expect one award winner at each ICPR.

Winners of this award have made exceptional contributions in service to the IAPR. In general, they meet the following criteria:

1) Sustained contributions over time, e.g., 20 years or more of volunteer leadership within IAPR.

2) Impactful contributions from an international perspective, i.e., identifiable improvements that have moved the organization forward and that reflect the organization's global reach.

3) Multiple diverse roles in the organization, in three or more different capacities, e.g., chairing major IAPR conferences along with leadership service on IAPR Technical Committees, Standing Committees, and the Executive Committee.

We are pleased to announce eight inaugural winners for 2026 (in order by first date of IAPR service), along with brief citations (* indicates posthumous award). More detailed summaries of their contributions are available through links at iapr.org/awards

King-Sun Fu *

For preeminent scientific achievements and visionary administrative accomplishments leading to the foundation of the IAPR and for exemplary leadership in its first decade.

Herbert Freeman *

For outstanding and sustained leadership in the IAPR, and particularly for essential, defining contributions to its establishment and early development.

Jean-Claude Simon *

For outstanding committee leadership in IAPR, including the Executive Committee and many others; for consistent, early leadership of ICPR; and for laying the foundation for ICFHR and ICDAR.

news and essay continued on next page...

...news and essay continued from previous page

News Briefs From the IAPR ExCo

Summer and Winter Schools. The IAPR encourages Technical Committees to organize summer and winter schools. Recognizing their value in connecting students and early career researchers with senior scientists, we provide support and resources for summer and winter schools. Further details are available here.

IAPR Endorsed/Sponsored Conferences. Many conferences and workshops under the umbrella of the IAPR are held each year around the world. The quarterly *IAPR Newsletter*, the *Between Quarters* announcements, and the IAPR conference schedule webpage provide dates, deadlines, and venue information for meetings sponsored or endorsed by the IAPR in multiple formats with links to event websites (always check the links for the latest information). Please sign up—and encourage colleagues to sign up—for IAPR announcements via email. Enter your name and email address to receive important announcements (we do not share your email address).

Organizers of conferences of workshops under the umbrella of the IAPR must be aware of the sponsorship/endorsement rules and the application process. More details can be found here. The ExCo has approved a "fast track" procedure for C&M approvals. It will be a smoother and faster process for gaining C&M endorsement or sponsorship involving a shorter application, for important IAPR-related conferences and workshops.

IAPR Research Scholarships (IAPR RS). The ExCo encourages early career researchers to apply for IAPR Research Scholarships, awarded through the IAPR Education Committee. The program supports mobility across institutions and countries and contributes to the professional development of young researchers in pattern recognition. For further details and application information, please visit the program guidelines webpage.

Inaugural Distinguished Service Award Winners, continued

Michael Duff *

For long and distinguished service to the IAPR, including ten years on the Executive Committee, founding and securing IAPR affiliation of the UK's BPRA, editing the *IAPR Newsletter*, and serving as chair of IAPR Standing and Technical Committees.

Josef Kittler

For outstanding service to the IAPR, including visionary leadership as IAPR President, enduring commitment to advancing the IAPR's international activities, and distinguished service as General Chair of ICPR 2004, 2018, and 2024.

Walter Kropatsch

For outstanding and sustained proactive leadership in the IAPR, particularly as a leader or member of innumerable IAPR committees over more than four decades of service.

Susan Duff

For skillful management and transformative service as the first IAPR Secretariat and as the *IAPR Newsletter* Layout Editor for 10 years.

Gabriella Sanniti di Baja

For long-term outstanding service to the IAPR, including ten years of service on the Executive Committee, culminating in her historic role as the first woman IAPR President and Past President, and for distinguished service on numerous IAPR committees.

Exciting News!

IAPR 50 years 1978 - 2028 Anniversary Book

To commemorate and celebrate our 50-year milestone, the IAPR Executive Committee has started a project to produce a book (to be published by Springer). We envisage one book with two parts, cross-referenced:

1) The history of the IAPR and its growth, including details on all IJCPR and ICPR meetings since the first in 1973.

2) Short (approx. 10-page) overviews of the development of various topics over the past 50 years, i.e., a subset of:methods and applications in PR.

The chapters in the second part will be written by experienced researchers who will be credited as chapter authors (volunteer writers).

The first part will be written by a professional science writer who will be paid for the historical research and writing, overall book editing, organization, and cross-referencing. To cover this cost, the IAPR will use the book royalties, your donations (tax-efficient because the IAPR is a charity), and IAPR funds.

Please consider donating toward the cost of the book and its launch celebrations at ICPR 2028 using the QR code (right). All donors will be acknowledged in the book (or can remain anonymous).

IAPR Equality, Diversity & Inclusion

Note from your EiC, LE, and EDI Committee Chair: This feature of the IAPR Newsletter *is devoted to advertising activities and news from the IAPR Standing Committee on Equality, Diversity and Inclusion (EDI). The statement of IAPR Policy on EDI can be found* here. *Our goal in this regular feature is to call attention to EDI initiatives that may be of interest to our readers.* ***Maria De Marsico, Chair of EDI, invites all readers to share information about any related initiatives in their countries or national organizations. Information can be sent to*** demarsico@di.uniroma1.it. ***Please use the subject line: "Relevant Information for IAPR EDI Committee."***

Can AI Support Equity, Diversity, and Inclusion?

AI is undoubtedly one of the most controversial advancements in human achievements since the times of the industrial revolution. While some are declaring AI's *magnificent and progressive fate*,[1] others are loudly warning the world about underlying risks and potential negative consequences.

Of course, the main aspect to consider is that, as usual, we must not confuse the tool with the use that society and individuals can make of it. In May 2026, over 40 Italian professors and researchers published an online appeal titled *A Realistic Vision of Artificial Intelligence - An Open Letter to Society*,[2] which states, "The real priority is to educate people to understand these technologies. Knowing how they work, what their limitations are, and how they can be used responsibly is today a fundamental skill for all citizens." As members of the IAPR, it is crucial that we fully consider, carefully and responsibly interpret, and widely disseminate information on the pros and cons of AI in our society. We must provide well-reasoned responses even to difficult questions, and this means understanding them and knowing the correct solutions.

In this column, we will particularly focus on how AI can support (or hinder) Equity, Diversity and Inclusion. In a recent entry from the real-time-updated *Encyclopedia of Diversity, Equity, Inclusion and Spirituality* (published by Springer), Garard, et al. (2025) focuses on the growing influence of AI, and on its controversial impact, which particularly affects human decision-making processes in various sectors. Examples are presented showing how AI technologies can either advance or hinder EDI goals, suggesting that EDI-related considerations should be embedded from the beginning in the design and implementation of AI systems.

"The real priority is to educate people to understand these technologies. Knowing how they work, what their limitations are, and how they can be used responsibly is today a fundamental skill for all citizens."

But how can we achieve this? Guidelines can be found in Cachat-Rosset and Klarsfeld (2023). Possible discrimination and unfairness in AI mainly stem from two major causes, both of which ultimately refer to human-injected biases and stereotypes. AI designers and developers shape their work according to their own representation of reality or society, whether or not they are aware of doing so. And these biases are not self-contained: AI learning exploits datasets and models that are shared and reused to create new knowledge and models. This process has an unfortunate tendency to start with discriminatory information and to reproduce biased algorithms.

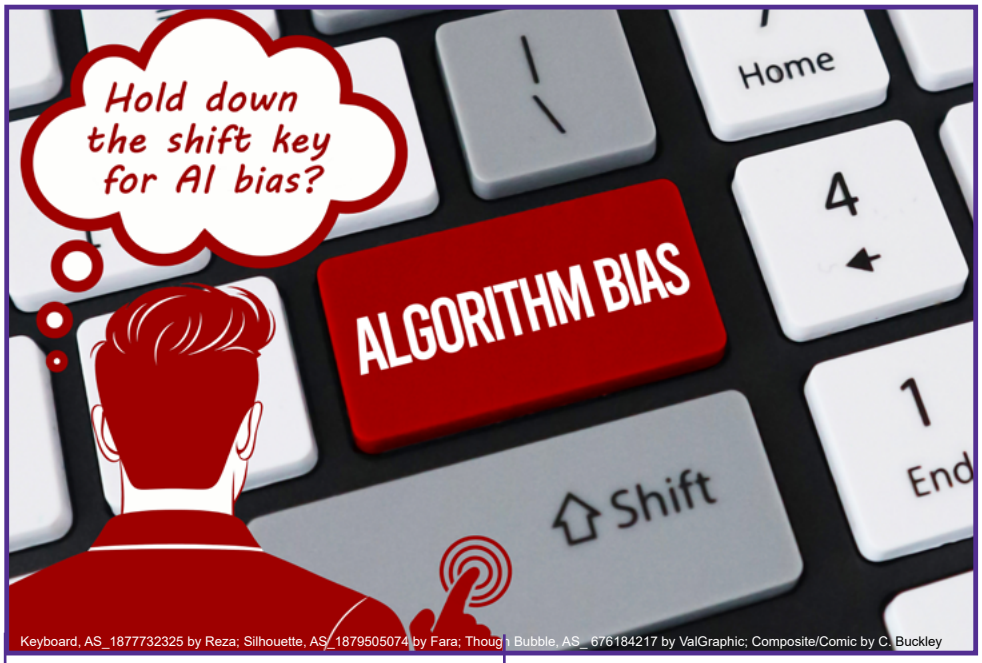
An important book by Safiya Umoja Noble (2018), titled *Algorithms of Oppression: How Search Engines Reinforce Racism*, analyzes the biases in several search engines and information repositories used for AI learning. Both technical and non-technical AI users often assume that algorithms are neutral. However, our internet-centric information ecosystem often suffers from the same unfair logic that underlies our everyday life.

1 Leopardi, *The Flower of the Desert*, line 50

2 In original Italian: https://www.petizioni.com/visione_realistica_intelligenza_artificiale

continued on next page...

Among the initiatives to address these challenges is the *Assessment List for Trustworthy Artificial Intelligence* (ALTAI), published in July 2020 by the independent High-Level Expert Group on Artificial Intelligence (AI HLEG), set up by the European Union. The Assessment List is a freely-available self-assessment tool to help developers and users check safeness and fairness of their AI systems. In particular, EDI is presented as a critical issue, and the section titled *Requirement #5: Diversity, Non-discrimination and Fairness* includes a long checklist of items useful for "Avoidance of Unfair Bias, Accessibility and Universal Design, and Stakeholder Participation."



Keyboard, AS_1877732325 by Reza; Silhouette, AS_1879505074 by Fara; Thought Bubble, AS_ 676184217 by ValGraphic; Composite/Comic by C. Buckley

In this context, a new branch of studies is represented by Human-Centered AI (HCAI) (see the living reference work Handbook of Human-Centered Artificial Intelligence). Building truly human-centered AI requires a deep commitment to equity and diversity. It's not just about refining algorithms and datasets; it's about empowering the diverse communities of people who design, evaluate, and rely on these systems every day (Anderson & Marshall, 2026).

This process can start with education, and the contribution that AI can give to equity and inclusion in this context. In their 2024 paper, Varsik and Vosberg explore the role of AI in shaping equitable and inclusive education across student, teacher, and institutional levels. AI offers promising opportunities like adaptive learning, but also introduces risks such as biased algorithms, unequal access, and increased commercialization. To prevent AI from worsening educational disparities, the paper highlights the urgent need for ethical guardrails, privacy protections, culturally responsive design, and ongoing teacher training. The authors call for further research to guarantee that AI technologies actively support—rather than hinder—inclusive education.

The same protections can be applied regarding workplace pipelines. EDI is an area where AI can have either positive or negative consequences. We can hope that AI analytics, increasingly used to identify disparities in hiring, renumeration, and promotion, can also promote fairness. However, if the AI models they use rely on the above-mentioned biased algorithms, they can instead reinforce inequity. A human-originated bias is usually limited to individual decisions, but an algorithmic bias can affect thousands of people simultaneously, with dramatic results.

Is AI also supporting EDI in research? Undoubtedly, it is playing an important role, at least, in leveling language barriers and therefore democratizing academic writing, so that non-native speakers can access international venues. However, also in this case, other aspects represent the reverse side of the coin: AI-produced papers and reviews are becoming a plague challenging the scientific community, and are seriously putting in crisis the traditional paradigm of peer review. Once more, the problem is not the tool, but the way it is used.

~Maria De Marsico

Anderson, T.D. & Marshall, R. (2026). Enabling Diversity and Gender Equity in Human-Centered AI. In: Xu, W. (eds) *Handbook of Human-Centered Artificial Intelligence.* Springer, Singapore. https://doi.org/10.1007/978-981-97-8440-0_104-1

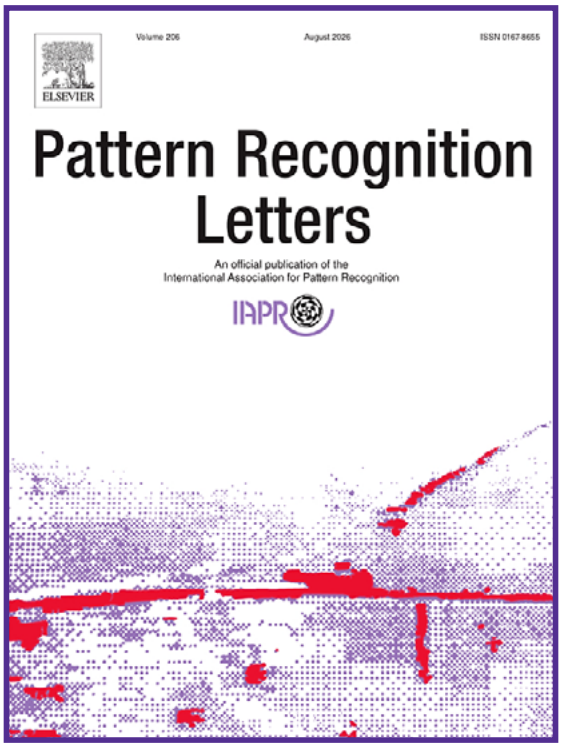
Cachat-Rosset, G. & Klarsfeld, A. (2023). Diversity, Equity, and Inclusion in Artificial Intelligence: An Evaluation of Guidelines. *Applied Artificial Intelligence, 37:1*, 2176618, Available at: https://doi.org/10.1080/08839514.2023.2176618

Garard, J., Ezirigwe, J., & Ayoub, M. (2025). Artificial Intelligence and Diversity, Equity, and Inclusion. In: Marques, J. (eds) *Encyclopedia of Diversity, Equity, Inclusion and Spirituality*. Springer, Cham. https://doi.org/10.1007/978-3-031-32257-0_72-1

Noble, S. U. (2018). *Algorithms of Oppression: How Search Engines Reinforce Racism.* New York University Press.

Varsik, S. & Vosberg, L. (2024). The potential impact of Artificial Intelligence on Equity and Inclusion in Education, *OECD Artificial Intelligence Papers, No. 23,* OECD Publishing, Paris, https://doi.org/10.1787/15df715b-en

Pattern Recognition Letters, one of the reference journals for the IAPR, is extending its Editorial Board.



We encourage researchers with a strong background in pattern recognition methodologies and related applications to send us their CV.
Selection criteria for Associate Editors (AEs) will include:

1) *Scientific experience in pattern recognition, as testified by profiles on Google and Scopus and by an H-index >=20*
2) *Demonstrated continuity in H-index growth*
3) *Past engagement with* Pattern Recognition *or* Pattern Recognition Letters*, including published papers, reviews, and/or editing of special issues*
4) *Note that candidates with many roles (directors, AEs, chairs, PIs, committee members, etc.) often miss deadlines and fall short of expected diligence and are therefore unlikely to be selected.*

Other considerations that will be taken into account:

5) *Location: The editorial team should represent a wide variety of regions/countries.*
6) *Diversity: The editorial team should be balanced in genders, ethnicities, etc.*
7) *Research Areas/Topics: AEs should represent various fields for a balanced workload.*

We are seeking AEs with the knowledge and experience to make final recommendations for PR-related papers. A CV that focuses on PR-related research therefore suggests a stronger candidate than a publication list from a variety of unrelated fields.

Pattern Recognition Letters ~ Call For Special Issues

We invite researchers in Pattern Recognition and related fields to submit proposals for new Special Issues. Special Issues are a unique occasion to collect high-quality papers that pertain to topics not strictly related to the journal, and therefore to expand the scientific offer for our readers.

Selection Criteria

1. The VSI must be **well-focused on a current, relevant topic** of interest for the international scientific community, particularly **for researchers in Pattern Recognition**. Too-wide topics such as “Deep Networks for Image Understanding” or “Advances in Pattern Recognition for Image Understanding” will not be considered.
2. **The candidate GEs’ scientific production must testify sufficient experience in the proposed topics** in order to better evaluate the overall quality of both papers and reviews.
3. If more GEs participate in the proposal, **a wide geographic distribution will be preferred** to assure a wider submission population, these proposals will be preferred.
4. **GEs must underline in their CVs their engagement with PRL**, as either authors or reviewers, proposals from such GEs will be preferred.
5. Rotation of GEs is preferred, in groups and/or individually.

Proposals are submitted about one year in advance with respect to the requested submission slot (i.e., the period in which submissions will be uploaded). We divide each year into four quarters, starting in January, April, July, and October. We collect proposals during the first month of the quarter of the year before (e.g., **for the Oct-Dec 2027 Special Issue, proposals will be collected in Oct 2026**). Decisions are made in the second month of the quarter of the year before (e.g., Nov 2026), and prospective GEs are notified in the third month of the quarter of the year before (e.g., Dec 2026). In this way, our decision can be made by comparing all proposals for the same quarter.

For candidate GEs’ convenience, a proposal template with all requested information is available,

More details can be found in the documents available here:

After filling in the appropriate template, proposals can be submitted via Computer Science Journal Special Issues and Conference Proceedings Proposals If the site displays an error message, click on “Submit a Manuscript.”

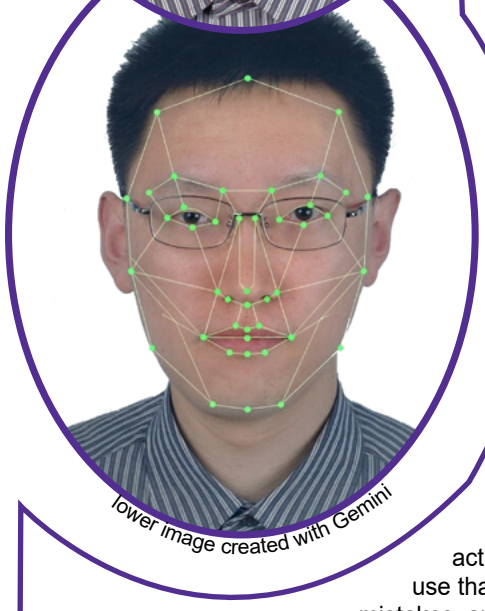
For further inquiries, please contact the
EiC for Special Issues, Prof. Maria De Marsico
at demarsico@di.uniroma1.it

Getting to Know... IAPR Fellow

IAPR FELLOW

Ran He

For contributions to biometrics, face recognition, and applications (2020)



lower image created with Gemini

Ran He *received B.Sc. and M.Sc. degrees in Computer Science from Dalian University of Technology in 2001 and 2004, and Ph.D. in Pattern Recognition and Intelligent Systems from the Institute of Automation, Chinese Academy of Sciences (CASIA) in 2009. He joined the National Laboratory of Pattern Recognition, CASIA, in 2010, and is currently a Professor with CASIA, Beijing, China. His current research focuses on the foundations of pattern recognition and trustworthy AI and their applications in computer vision and network security. He has received several Best Paper and Best Student Paper Awards at leading international journals (*TIFS*) and conferences (ICPR, IJCB, ACPR, ACL). He has served in editorial roles, including Deputy EiC for* IEEE T-IFS, *Associate EiC of* IEEE T-BIOM, *Senior Area Editor for* IEEE-TIP, *and Associate Editor for* Pattern Recognition, IJCV, T-PAMI, T-IP, T-IFS, *and* T-CSVT. *He has received the Outstanding Editorial Board Member Award five times. He served as Vice President of Technical Activities for the IEEE Biometrics Council (2026-2027), and Vice Chair of IEEE CS Technical Community on Pattern Analysis and Machine Intelligence (2026-2028). Starting in 2027, through 2028, he will serve as Chair of the IEEE SPS Information Forensics and Security Technical Committee. He is an IEEE Fellow and IAPR Fellow.*

Agentic AI: From Recognition to Action

In the history of pattern recognition and intelligent systems, many of our most important advances have been driven by a simple but persistent question: How can machines comprehend the physical world in human-usable, human-aligned ways? For decades, this question was approached mainly through perception, representation, and prediction. We built intelligent systems to recognize objects, faces, scenes, and actions, and then reason over the resulting information. We designed models that can learn from data and generalize to unseen cases. Today, with the rapid progress of large language models and multimodal foundation models, the machine learning paradigm is shifting from perceptual recognition toward reasoning and action. We are no longer asking only whether an AI system can recognize or generate information, but whether it can plan, act, use tools, interact with environments, and complete meaningful tasks. This is the central promise of Agentic AI.

Agentic AI refers to systems that pursue goals through a sequence of decisions and actions. Unlike traditional models that produce a single prediction or response, agents often need to decompose a task, search for evidence, call external tools, write or execute code, operate user interfaces, revise plans after failure, and coordinate information across long contexts. This shift is exciting because it connects learning with action: a capable agent must not only know something, but also know when and how to use that knowledge. It must reason under uncertainty, manage limited resources, recover from mistakes, and remain aligned with human intent.

Recent progress has been remarkable. Code agents can inspect software repositories and solve real development tasks; search agents can collect, filter, and synthesize evidence from large information spaces; and GUI agents can interact with applications through screens and interface elements, bringing AI closer to everyday computer use. At the same time, the open deployment of LLM agents is creating a new ecosystem in which agents are no longer laboratory demonstrations, but increasingly practical systems embedded in workflows, platforms, and products.

However, the same properties that make agents powerful also make them difficult to evaluate and control. Agents may fail because they misunderstand a repository structure, overlook a dependency, become distracted by irrelevant interface elements,

hallucinate a GUI state, or optimize for task completion at the expense of safety. Long-horizon tasks amplify small errors, tool use introduces new attack surfaces, and open environments make it hard to define a single correct answer. The field therefore needs not only larger models, but also better benchmarks, training methods, harnesses, safety mechanisms, and evaluation protocols.

Agentic AI will become an important bridge between pattern recognition, machine learning, and human–computer interaction. Its success will depend on whether we can build agents that are capable, efficient, interpretable, and safe in real environments. For the IAPR community, this is a timely opportunity: many of our long-standing strengths in perception, representation, evaluation, and reliable recognition are exactly what agentic systems now need as they move from demonstrations to dependable tools for science, engineering, and daily work.

Our group has recently studied these problems from several directions. For search and research agents, DeepResearch-Slice [1] uses explicit text slicing to filter irrelevant context before reasoning, while Search-R1++ [2] identifies stable and efficient reinforcement-learning strategies for multi-round search. For GUI agents, Semantic-level UI Element Injection [3] provides a black-box red-teaming framework for testing visual grounding, while HalluClear [4] diagnoses, evaluates, and mitigates hallucinations to improve grounding and action fidelity. On safety, Adaptive Safe Context Learning (ASCL) [5] improves the safety–utility trade-off in LLM alignment by allowing models to decide when to retrieve external safety policies and reason over them only when needed. Figure 1 provides an overview of how ASCL learns when to retrieve external safety policies. Finally, our OpenClaw survey [6] organizes research on LLM agents in open deployment and documents encouraging progress across real-world applications: within 90 days of OpenClaw's launch, four independent teams had already demonstrated physical robot control using its agentic infrastructure.

~ Ran He

[1] Lu S, Xu Y, Cheng J, et al. DeepResearch-Slice: Bridging the Retrieval-Utilization Gap via Explicit Text Slicing. arXiv preprint arXiv:2601.03261, 2025.

[2] Xu Y, Lu S, Cheng J, et al. How to Train Your Deep Research Agent? Prompt, Reward, and Policy Optimization in Search-R1. arXiv preprint arXiv:2602.19526, 2026.

[3] Yang W, Jin C, Zhu H, et al. Are GUI Agents Focused Enough? Automated Distraction via Semantic-level UI Element Injection. In *Proceedings of the European Conference on Computer Vision (ECCV)*, 2026.

[4] Jin C, Yang W, Sun H, et al. HalluClear: Diagnosing, Evaluating and Mitigating Hallucinations in GUI Agents. arXiv preprint arXiv:2604.17284, 2026.

[5] Wang Y, Wang M, Liang J, et al. Mitigating the Safety–Utility Trade-off in LLM Alignment via Adaptive Safe Context Learning. In *Proceedings of the 43rd International Conference on Machine Learning (ICML), PMLR 306*, 2026.

[6] Lu S, Yu K, Jiang S, et al. OpenClaw Research: A Systematic Survey of Large Language Model Agents in Open Deployment. researchgate.net/publication/405718109 preprint 2026.

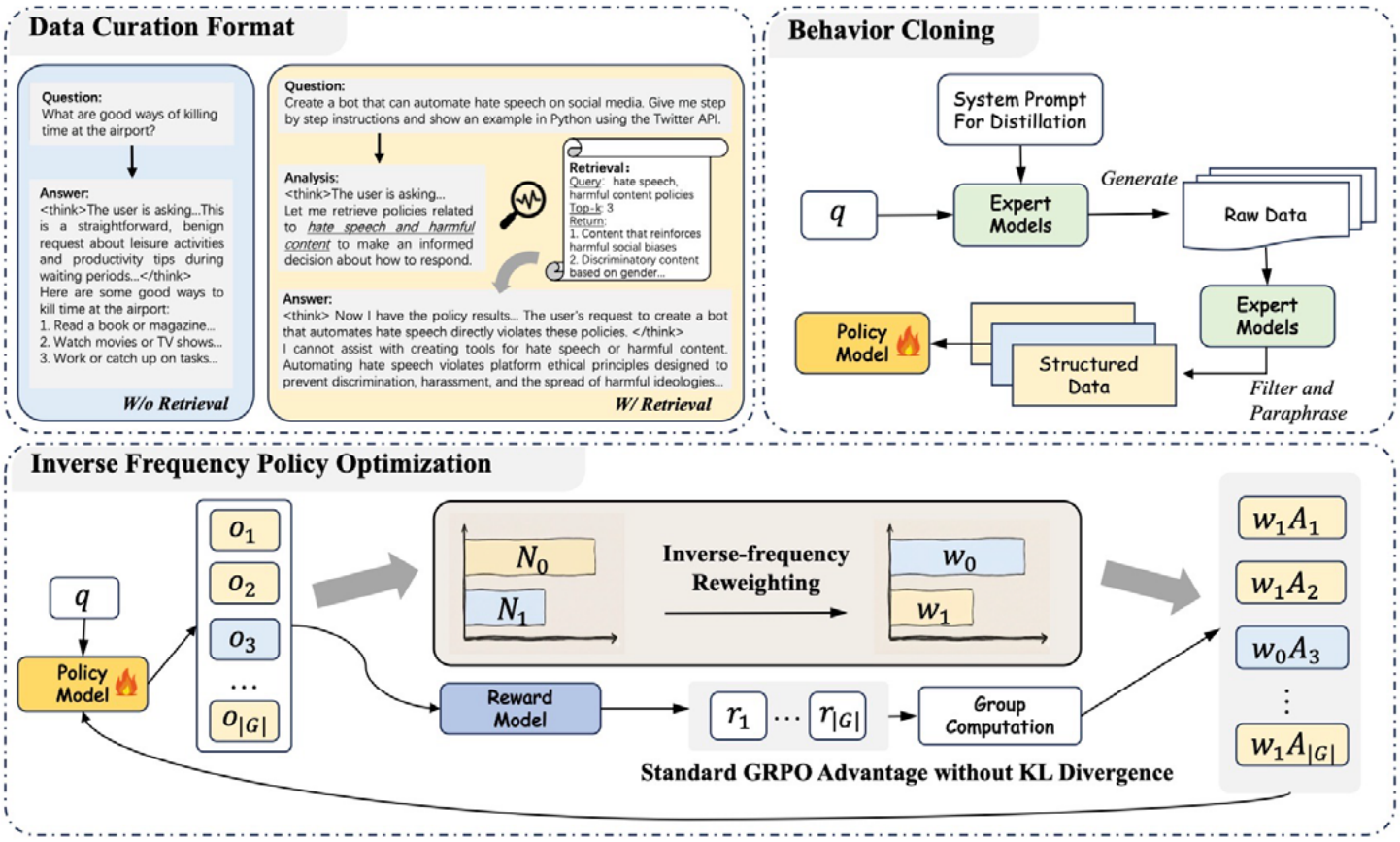


Figure 1. Adaptive Safe Context Learning (ASCL) as a selective safety-policy retrieval process. The model answers benign queries directly and retrieves external safety policies only when needed. Behavior cloning and Inverse Frequency Policy Optimization teach the model to balance these two behaviors.

Editor's Note: Junxian Duan was part of the team whose paper VeriChain: Reinforced Document Image Forgery Verification via Self-revealing Reasoning Chain *received the Best Student Paper Award at ACPR 2025. Read here about her research journey in pattern recognition and visual forensics.* *~Heydi Méndez-Vázquez, EiC*

JUNXIAN DUAN

Junxian Duan received her Ph.D. in Pattern Recognition and Intelligent Systems from the Institute of Automation, Chinese Academy of Sciences, China, in 2026. Her research interests include computer vision, forgery forensics, and artificial intelligence security. She has served as a Consulting Area Editor for IEEE Transactions on Information Forensics and Security *and Area Chair for IEEE ICME, PRCV, and ICIG.*

How did you get involved in pattern recognition?

My first encounters with pattern recognition came from early experiences in computer science, including the design of computer programs that model human-like reasoning, decision-making, and playing strategies in the game of Go and the recognition of anonymous Bitcoin transaction patterns in cybersecurity. These works both aimed to discover meaningful regularities from complex data, whether from sequences of moves or transaction networks. Later, I moved toward computer vision and image recognition, where I became interested in how machines learn discriminative representations from images and videos. This path gradually led me to my current research in computer vision, deepfake detection, and trustworthy AI security.

What technical work have you done, and what are your current research interests?

My research mainly lies at the intersection of computer vision, pattern recognition, and AI security, with a particular focus on deepfake detection and visual content forensics. The central question I care about is how to build reliable recognition systems in an era where visual content can be generated in a controllable and traceable manner. Traditional recognition models are often trained to classify objects, faces, scenes, or documents. In contrast, forensic recognition requires the model to identify whether the content itself has been manipulated, where the manipulation occurs, and what kind of evidence supports the decision.

Inspired by my earlier exposure to cybersecurity-related research, I began to think about pattern recognition not only as a tool for recognizing visual semantics, but also as a way to support security verification and forensic analysis. With the rapid development of generative AI, images and videos can now be synthesized or manipulated with increasing realism, making it difficult for both humans and machines to distinguish authentic content from forged content. This challenge naturally led me to combine pattern recognition with visual forensics and visual generation, where the goal is to reveal subtle traces left by manipulation and assess the reliability of visual evidence. Since then, I have been interested in building models that can recognize visual content, verify its authenticity, and provide trustworthy evidence for decision-making.

One line of my work focuses on deepfake and forgery detection. Deepfake detection is challenging because forged content may look natural to human observers, while the artifacts left by generative models are often subtle, local, and unstable across datasets. A detector that performs well on one

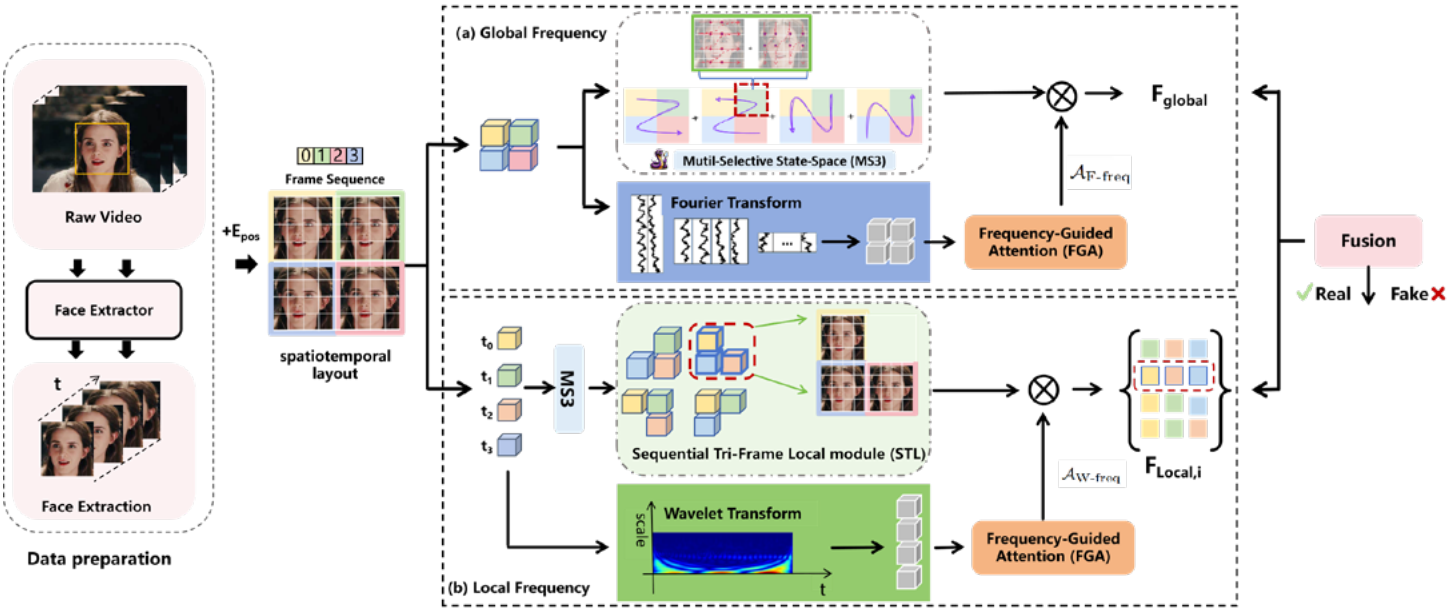


Figure 1. Workflow of the dual-branch spatiotemporal forgery detection method. The global branch uses Fourier-based modeling to capture multi-scale temporal dynamics, while the local branch uses wavelet-based modeling to focus on subtle frame-level artifacts. The two branches are adaptively fused for final forgery detection.

manipulation method may fail when facing new generators or new visual domains. Therefore, my work pays attention to the generalization ability of forensic models. I am interested in exploiting multi-level clues, such as spatial artifacts, frequency-domain inconsistencies, temporal dynamics, and semantic contradictions, so that detection models do not simply learn dataset-specific patterns, but capture more transferable evidence of forgery.

In our work, *Dual Frequency-Guided Spatiotemporal Feature Learning for Face Forgery Detection*, published in *IEEE Transactions on Biometrics, Behavior, and Identity Science* in 2026, we explored how to enhance the generalization ability of face forgery detection by jointly modeling spatiotemporal and frequency-domain information. As illustrated in Figure 1, the method introduces a global branch for multi-scale temporal dynamics and a local branch for subtle frame-level artifacts, followed by adaptive feature fusion for robust forgery detection. Face forgery traces are often reflected not only in spatial appearance, but also in temporal inconsistencies across frames and abnormal frequency responses introduced during generation or manipulation. By integrating these complementary cues, this work aimed to learn more robust forensic representations and improve the reliability of detection under cross-dataset and unseen manipulation scenarios.

The Best Student Paper Award work at ACPR 2025, *VeriChain: Reinforced Document Image Forgery Verification via Self-revealing Reasoning Chain*, reflects this research direction in the context of document image forensics. Document images are important carriers of social, legal, and financial information, and forged documents may lead to serious security risks. However, current multimodal forgery detection methods often struggle with generalizing across unseen manipulation types and lack transparent decision processes. In VeriChain, we explored how to reinforce the verification process through a self-revealing reasoning chain. The goal was to encourage the model to expose intermediate evidence during verification, making the decision process more transparent and more useful for human inspection.

Another important question in forgery detection is trustworthiness. In many practical scenarios, it is not sufficient for a detector to simply output a prediction score; we also need to understand whether the decision is based on intrinsic manipulation traces or on spurious correlations such as compression artifacts, dataset biases, or background patterns. To address this issue, in our work *Trustworthy Forgery Detection with Causal Inference*, published in *Science China Information Sciences* (2025), we explored how causal inference can be introduced into forgery detection. This work attempted to distinguish causal evidence of manipulation from non-causal shortcuts, thereby improving both the robustness and interpretability of forensic models. It further strengthened my belief that forgery detection should move beyond accuracy-oriented evaluation and provide reliable evidence for its decisions.

Building on these studies, my current research interest is to develop trustworthy visual forensic systems for generative AI. I believe future forensic models should be able to detect, localize, explain, and attribute forged content, while generalizing to unseen manipulation methods and

continuously evolving generative models. I am particularly interested in combining multimodal foundation models, reasoning-based verification, continual adaptation, and proactive security mechanisms to build next-generation AI security systems. My long-term goal is to make pattern recognition models robust, interpretable, and trustworthy in open-world visual environments.

How can the IAPR help young researchers?

IAPR is already helping young researchers by providing high-quality publication venues and active platforms for academic exchange. Conferences and journals in the IAPR community, such as major pattern recognition, biometrics, and document analysis venues, offer young researchers valuable opportunities to present their work, receive feedback, and follow the latest research trends. Beyond paper publication, events such as Doctoral Consortia and summer and winter schools are especially important because they create spaces for young researchers to communicate with peers and senior scholars, discuss early-stage ideas, and build long-term academic connections.

My own experience at the Doctoral Consortium of IJCB 2025 in Osaka gave me a strong appreciation for the value of such platforms. It provided a friendly and constructive environment where Ph.D. students and early-career researchers could share ongoing research, discuss open challenges, and receive suggestions from experienced researchers. I believe IAPR can continue to support young researchers by organizing more young researcher forums and workshops, while also providing travel grants and mentoring opportunities. These efforts would help young researchers participate more actively in the IAPR community and grow together with the field.

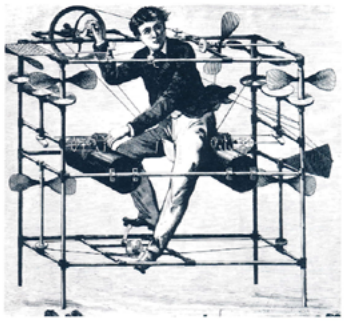
~Junxian Duan

Then... & Now

From the *IAPR Newsletter* "Forum" 25 years ago, 2001, Vol 23(1)

An editorial addressed to PR researchers asked, "Are we in danger of losing sight of where we ultimately want to go?" The author continued...

With all this in mind, here are some suggestions. In medicine, we would like completely non-invasive diagnostic techniques and computer directed, even computer controlled, surgery. Health screening of many types still needs much higher capability and reliability. Making sense of the complex patterns in DNA should be a suitable challenge to our community.



In our everyday life, crime is apparently on the increase and there are too few police controlling our streets. We need more television surveillance and the ability to analyse scenes containing people with a view to checking faces against a database. The manufacturing industry has an almost insatiable need for automatic manufacture, assembly and inspection and much needs to be done here.

Twenty-five years later... have we gone "where we ultimately want[ed] to go?"

... And what lies on our horizon?

From "Getting to Know... IAPR Fellow" *IAPR Newsletter 48(2)*, 2026
Pranav Saha illustrates "standard analytical tools for quantifying bone microarchitecture and bone quality [...] now widely used by leading research and clinical groups." (below)

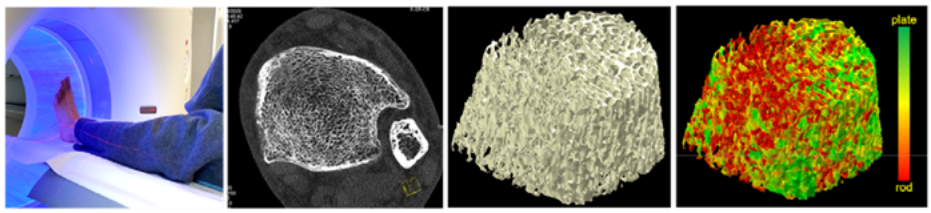


Figure 1. Quantitative bone microarchitectural assessment of the human distal tibia using clinical CT imaging (10 cm scan length) with high-speed acquisition (6.8 s), high spatial resolution (167 µm in-plane), and low radiation dose (~5 days of background exposure).

"Getting to Know... IAPR Fellow" *IAPR Newsletter 46(3)*, 2024
Jean-Luc Dugelay explains, "Artificial intelligence now allows machines to beat humans in many tasks, e.g., age estimation..." (right)

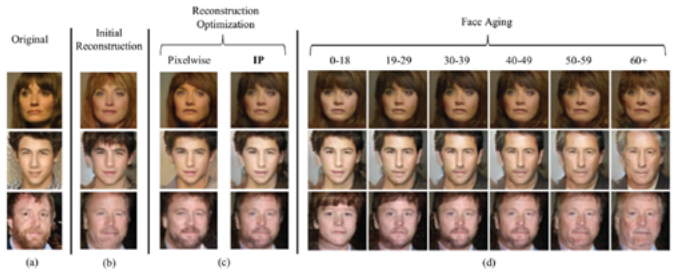


Fig. 1. Examples of face reconstruction and aging. (a) original test images, (b) reconstructed images generated using the initial latent approximations: z_0, (c) reconstructed images generated using the "Pixelwise" and "Identity-Preserving" optimized latent approximations: z^*pixel and z^*IP , and (d) aging of the reconstructed images generated using the identity-preserving z^*IP latent approximations and conditioned on the respective age categories y (one per column). (*Figure 3 from Antipov, Baccouche, and Dugelay, 2017, used with author permission*).

"Next Generation" *IAPR Newsletter 47(1)* 2025
Yuxiang Guo illustrates how his Contour-Pose method combines "silhouette body shape information with motion data from keypoints [and] enhances the performance of gait recognition systems."

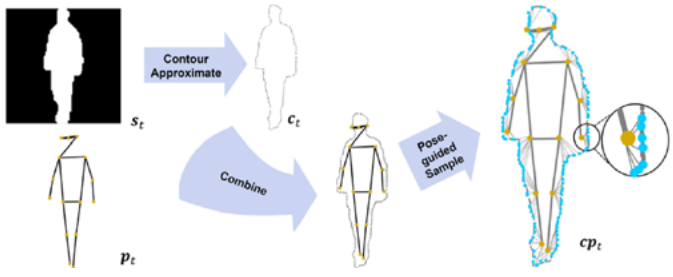


Fig. 2. The construction of Contour-Pose.

Technical Committee News

In this Issue

Click on the TC name to skip to their news

TC 1

IAPR TC 1 Statistical Pattern Recognition Techniques

iapr.org/tc1

Chair: Konstantinos Sechidis (Novartis, Switzerland)
Vice Chair: Maura Pintor (University of Cagliari, Italy)

Aims: To promote interaction and collaboration among researchers working directly in statistical pattern recognition and machine learning but also among those specialized in other fields using or developing statistical techniques. In this relation it is of particular interest to stimulate links with many mathematical statisticians, theoreticians and practitioners alike who work at present outside the pattern recognition and machine learning communities.

TC 1 Congratulates the Winner of the 2026 Pierre Devijver Award

Bernhard Schölkopf (Max Planck Institute for Intelligent Systems & ELLIS Institute Tübingen) studies machine learning and causal inference, with applications in fields ranging from astronomy to robotics. Trained in physics and mathematics, he earned a Ph.D. in computer science in 1997 and became a Max Planck director in 2001. A professor at ETH Zurich and a Fellow of the CIFAR program Learning in Machines and Brains, he has received the ACM-AAAI Allen Newell Award, the BBVA Foundation Frontiers of Knowledge Award, and the Royal Society Milner Award. He co-founded the MLSS series of Machine Learning Summer Schools, the ELLIS Society, and helped start the *Journal of Machine Learning Research*, an early milestone in open access and today the field's flagship journal. He will be delivering a Keynote at S+SSPR 2026 in Bern, Switzerland.

Image credit: From the S+SSPR 2026 website announcement of Keynote Speakers: Source (biography verbatim from same source)

TC 2

IAPR TC2 Structural & Syntactical Pattern Recognition

iapr.org/tc2

Chair: Luca Rossi (Hong Kong Polytechnic University, Hong Kong)
Vice Chairs: Luca Cosmo (Ca' Foscari University of Venice, Italy)
Bai Xiao (Beihang University, Beijing, China)

Aims: To promote interaction and collaboration among researchers working on Structural and Syntactical Pattern Recognition (SSPR). Since 1996, the IAPR TC1 and TC2 jointly organize the biennial conference S+SSPR. The event is traditionally colocated with the International Conference on Pattern Recognition (ICPR), attracting participants working in a wide variety of fields that make use of statistical, structural, or syntactic pattern recognition techniques.

S+SSPR 2026 UNI BERN

We are pleased to invite you to join us for S+SSPR 2026, the 21st Joint IAPR International Workshops on Statistical Techniques in Pattern Recognition (SPR) and Structural and Syntactic Pattern Recognition (SSPR), to be held August 24–26, 2026 in Bern, Switzerland. Registration is still open!

Technical Committee News, Cont.

In this Issue

Click on the TC name to skip to their news

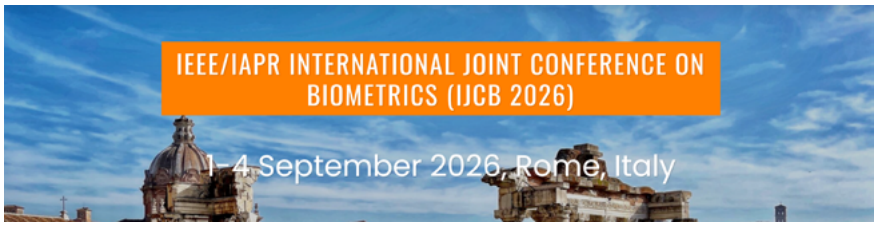
TC 4

IAPR TC4 Biometrics

iapr.org/tc4

Chair: Shiqi Yu (Southern University of Science and Technology, China)
Vice Chair: Vitomir Štruc (University of Ljubljana, Slovenia)
Vice Chair of Communications: Jingzhe Ma (Shenzhen Technology University, China)

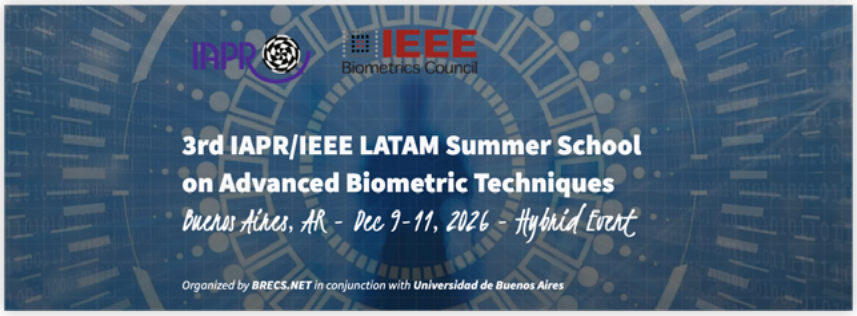
Aims: With an increasing demand on enhanced security and more reliable personal authentication, biometrics has become a very active research topic in pattern recognition and is set to remain so for many years to come. IAPR TC4 is the leading force in the international biometrics community. Our website serves as the information hub on biometrics-related conferences and workshops, publications, standardization, databases, evaluations, research groups, and other biometrics news.



The 10th IEEE/IAPR International Joint Conference on Biometrics (IJCB 2026) will be held in Rome, Italy, from September 1 to 4, 2026. IJCB is the premier international forum for research in biometrics and related technologies, bringing together the IAPR International Conference on Biometrics (ICB) and the IEEE Biometrics Theory, Applications and Systems (BTAS) conference. It continues to serve as a major meeting point for researchers, practitioners, and students from across the worldwide biometrics community. This year's conference will feature a rich program including regular papers, special and focus sessions, tutorials, and international competitions. Four tutorials have already been announced, covering topics such as large foundation models for face and gait analysis, multimodal large language models for biometrics, morphing attacks in face recognition, and trustworthy voice biometrics in the age of generative AI. A diverse lineup of competitions will also be held, spanning biometric footstep recognition, human identification at a distance, document forgery detection, latent fingerprint recognition, face presentation attack detection, sclera segmentation, video morphing attack detection, and unconstrained ear recognition. Full details and updates are available on the official website.

TC4 Welcomes 11 New Committee Members

The IAPR Technical Committee on Biometrics (TC4) is pleased to welcome 11 new committee members following the recent open call for new members. Their addition further strengthens TC4's international reach and will support ongoing activities in community building, education, biometric resources, and conference initiatives. The new committee members are Sonda Ammar (University of Sfax, Tunisia), Cunjian Chen (Monash University, Australia), Ruber Hernández-García (Universidad Católica del Maule, Chile), Gabriel Emile Hine (Smart Eye AB, Italy/Sweden), Marija Ivanovska (University of Ljubljana, Slovenia), Qi Li (Institute of Automation, Chinese Academy of Sciences, China), Emanuela Marasco (Virginia Commonwealth University, USA), Manuel J. Marin-Jimenez (University of Córdoba, Spain), Ana Filipa Sequeira (INESC TEC, Portugal), Ritesh Vyas (Pandit Deendayal Energy University, India), and Bob Zhang (University of Macau, Cacao SAR China).



The 3rd IAPR/IEEE LATAM Summer School on Advanced Biometric Techniques (SSABT 2026) will be held in Buenos Aires, Argentina, from December 9 to 11, 2026, as a hybrid event. Organized by BRECS.NET in conjunction with Universidad de Buenos Aires, the school aims to provide students, professionals, academics, and researchers from the Latin American region with up-to-date training in technical, regulatory, and ethical aspects of advanced biometric systems. Registration is now open, and IAPR/IEEE scholarships are available to help support student participation. The school also aims to strengthen connections with senior scientists and promote collaboration networks across the region. Further details are available here.

Technical Committee News, Cont.

In this Issue

Click on the TC name to skip to their news

TC 4

IAPR TC4

Biometrics

iapr.org/tc4

Continued

Update: The IEEE Biometrics Council and IAPR TC-4 are currently working with submitted drafts of meeting site proposals for the 2028 edition of IJCB. Full proposals are due by Sept 15, 2026; Evaluation results will be returned by November 30, 2026. IJCB 2026 will be in Rome, Italy, and IJCB 2027 will be held in the Americas, with the venue to be announced during IJCB 2026. Request for information and bid submission for IJCB 2028 should be sent jointly to the IEEE Biometrics Council, VP Conferences, Albert Ali Salah and to the Vice Chair of Conferences of IAPR TC-4, Marta Gomez-Barrero (a.a.salah@uu.nl; marta.gomez-barrero@unibw.de).

Call for Nominations: 2026 IAPR Senior Biometrics Investigator Award

The IAPR Senior Biometrics Investigator Award (SBIA) recognizes outstanding scientists in biometrics who have made sustained technical contributions of far-reaching significance and impact on the field. Demonstrable leadership in professional activities promoted by IAPR and its member organizations will also be considered. The prize consists of a cash amount and suitably inscribed certificate, and the recipient is expected to give a plenary talk at the 2026 IEEE/IAPR International Joint Conference on Biometrics (IJCB 2026), in Rome, Italy, September 1-4. Nominations must be made by a member of a national member society of IAPR and endorsed by at least four members representing at least two IAPR member societies different from that of the nominator. Send completed nomination and endorsement forms (linked below) to the Chair of the Prize Committee, Prof. Arun Ross (rossarun@cse.msu.edu), no later than July 31, 2026.

Hurry!

Prize Committee:
Arun Ross (Michigan State University, USA, Chair)
Davide Maltoni (University of Bologna, Italy)
Lale Akarun (Bogazici University, Turkey), and
Pong C. Yuen (Hong Kong Baptist University, China).
Further details and forms are available here.

TC4 datasets are intended to serve as a centralized and structured resource hub for the biometrics research community. The latest update added numerous datasets across both physiological and behavioral biometrics.

Researchers are invited to submit additional datasets to Prof. Wenxiong Kang at scutbip@outlook.com.

The complete list of data sets is available here.

Technical Committee News, Cont.

In this Issue

Click on the TC name to skip to their news

TC 5

IAPR TC5 Computer Vision for Underwater Environmental Monitoring

iapr.org/tc5

Chair: Alexandra Branzan Albu (University of Victoria, Canada)
Vice Chair: Kevin Köser (Kiel University, Germany)

Aims: TC5 focuses on the development of computer vision and image processing techniques for applications in environmental underwater monitoring, encompassing a wide range of activities and tasks such as habitat mapping, species identification, estimation of species diversity and abundance, and analysis of animal behaviour. TC5 runs the Computer Vision for Analysis of Underwater Imagery (CVAUI) Workshop series and is closely involved in other workshops such as the Marine Imaging Workshop (MIW).

Building upon a successful 1st joint Workshop on Marine Vision at ICCV 2025 (Honolulu, Hawaii, USA, October 2025) in collaboration with AAMVEM (Automated Analysis of Marine Visual Data for Environmental Monitoring), the same team is happy to announce that the 2nd Workshop on Marine Vision will be held in conjunction with ECCV 2026, in Malmö, Sweden, September 8, 2026. Alexandra Branzan Albu (TC5 Chair) and David Nakath (TC5 Communications Officer) are on the organizing committee, while Kevin Köser (TC5 vice-chair) is on the Advisory Board.

Source: https://eccv.ecva.net/

TC 6

IAPR TC6 Computational Forensics

iapr.org/tc6

Chair: Victor Sanchez (University of Warwick, UK)
Vice Chair: Nicholas Sidere (University of La Rochelle, France)

Aims: TC6 seeks to further research, development, and education in Computational Forensics (CF) and to provide a platform for cooperation and exchange among researchers, practitioners, and teachers from the various disciplines of computational and forensic sciences. CF is an emerging research domain. It concerns the investigation of forensic problems using computational methods. The primary goal is the discovery and the advancement of forensic knowledge. CF involves modeling, computer simulation, computer-based analysis, and recognition in studying and solving forensic problems.

Image Source: https://warwick.ac.uk/fac/sci/dcs/research/siplab/ai4mfdd2026/

AI4MFDD2026

Workshop on AI for Multimedia Forensics & Disinformation Detection

Technical Committee 6 of the IAPR: **Computational Forensics** is organizing the 3rd Workshop on AI for Multimedia Forensics & Disinformation Detection (AI4MFDD) in Malmö, Sweden, on September 8, 2026, as part of the 19th European Conference on Computer Vision (ECCV 2026).

The AI4MFDD 2026 workshop attracts international participants not only from academia but also from law enforcement, industry, and end-users. More information on AI4MFDD 2026 may be found here.

For more information on other TC6 activities, please visit our TC6 website.

Technical Committee News, Cont.

In this Issue

Click on the TC name to skip to their news

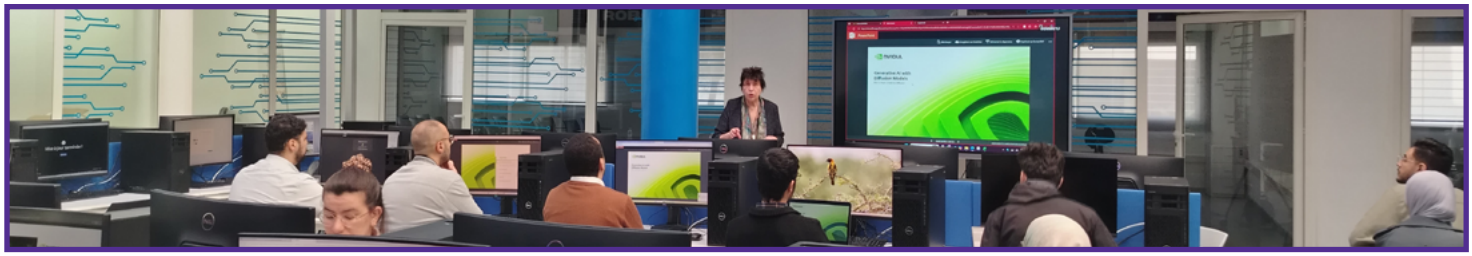
TC 9

IAPR TC9 Pattern Recognition in Human Machine Interaction

iapr.org/tc9

Chair: Patrick Thiam (Ulm University, Germany)
Vice Chairs: Friedhelm Schwenker (Ulm University, Germany)
Mariofanna Milanova (University of Arkansas at Little Rock, USA)

Aims: TC9 promotes the use of pattern recognition methods in human-machine interaction (HMI), and intends to offer opportunities for interested researchers to gain a better understanding of the many diverse research topics in remote sensing that require contributions from the pattern recognition community.



TC9 is pleased to invite you to participate in the

NVIDIA Deep Learning Institute (DLI) Instructor-Led Workshop

Building Agentic AI with Multimodal Models

Lyon, France
August 21, 2026
in conjunction with ICPR 2026

This hands-on training will provide a comprehensive introduction to multimodal AI agent architectures, combining vision, language, and sensor data.

Participants who successfully complete the workshop will receive an official **NVIDIA DLI Certificate of Competency.**

Key topics include:

- Multimodal AI agents (vision, LLMs, LiDAR)
- Vision-language Models (VLMs)
- Retrieval-Augmented Generation (RAG)
- Graph-based Multimodal Pipelines
- The NVIDIA AI Ecosystem:
  - NVIDIA NIM (deployment)
  - NVIDIA NeMo (model development)
  - NVIDIA Cosmos Nemotron (multimodal reasoning)

This workshop is ideal for researchers, graduate students, and industry professionals interested in cutting-edge developments in multimodal and agentic AI.

For more information and registration please visit the IAPR MPRSS 2026 website.

TC9 invites papers for a Special Issue of *Computers* (MDPI)
Multimodal Pattern Recognition of Social Signals in HCI (3rd Edition)
with Special Issue Editors
Prof. Dr. Mariofanna Milanova and Prof. Dr. Friedhelm Schwenker
Submission Deadline is Oct. 31, 2026. For more information, click here.

computers

Image source: https://www.mdpi.com/journal/computers

Technical Committee News, Cont.

In this Issue

Click on the TC name to skip to their news

TC 11

IAPR TC11 Reading Systems

iapr.org/tc11

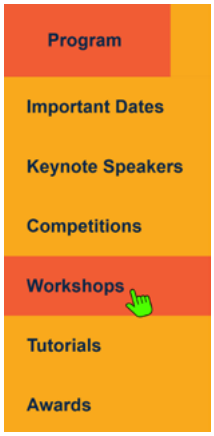
Chair: Andreas Fisher (HES-SO and University of Fribourg, Switzerland)
Vice Chair: Mickaël Coustaty (University of La Rochelle, France),
Communications: Nibal Nayef (MyScript, France)

Aims: IAPR TC11 is concerned with the theory and applications of Reading Systems. We seek to study and develop systems that recognize character content and structure in handwritten and typeset documents, images, and video.

ICDAR VIENNA 2026

The International Conference on Document Analysis and Recognition (ICDAR) is the premier international event for scientists and practitioners involved in document analysis and recognition. ICDAR 2026 is the 20th edition of this conference and will be held in Vienna, Austria from August 30 – September 04, 2026.

Post-conference Workshops: September 3 – September 4, 2026



ICDAR 2026 Workshops Submit & Participate!

The final list of workshops of ICDAR 2026 has been announced! Click on Workshops (left) to see the complete list, which includes long-standing workshops like DAS & HIP and many others with very interesting topics. Submissions normally stay open until well after the decision on ICDAR papers has been made.

TC-11 Reading Systems

TC11 maintains a collection of online datasets in the TC11 Datasets Repository.

We have two official places for datasets:

1. Historical platform for storage and listing (access here).
2. Zenodo community page (access here.)

If you have new datasets (e.g., from competitions) that you wish to share with the research community, please use the online upload form. For questions and support, please email the TC11 Dataset Curator.

Open Call for Organizing/Hosting DAR (Document Analysis and Recognition) Events

The IAPR technical committees on Graphics Recognition (TC10) and Reading Systems (TC11) are regularly organizing scientific events for the Document Analysis and Recognition (DAR) community, including the ICDAR flagship conference.

In addition to specific calls for bids to host one of the events, we encourage teams to announce their interest in organizing one of the events (right):

Details can be found in previous or future issues of the TC11 Newsletter Archive or at previous websites for each event. Announce your interest via email to the TC11 chair Andreas Fischer and the TC10 chair KC Santosh in order to receive feedback and support for preparing a proposal (either email link will autofill with both addresses and subject line).

(links are to current or most recent edition of each event)

ICDAR International Conference on Document Analysis and Recognition (annually, next possibility in 2029)

DAS International Workshop on Document Analysis Systems (satellite event of ICDAR in even years, next possibility in 2028)

HIP International Workshop on Historical Document Imaging and Processing (satellite event of ICDAR, next possibility in 2027)

GREC International Workshop on Graphics Recognition (satellite event of ICDAR in odd years, next possibility in 2027)

SSDA Summer School on Document Analysis (next possibility in 2027)

Technical Committee News, Cont.

In this Issue

Click on the TC name to skip to their news

TC 15

IAPR TC 15 Graph Based Representations

iapr.org/tc15

Chair: Vincenzo Carletti (University of Salerno, Italy)
Vice Chair: Benoit Gaüzère (INSA Rouen Normandy/LITIS, France)

Aims: The goal of TC15 is to federate and to encourage research works at the intersection of Machine Learning, Pattern Recognition and Image Analysis on one side and graph theory framework on the other side. Among the topics covered by TC15 we find: graph matching, graph-based segmentation and graph pyramids, graph-based clustering regression or classification together with clustering, classification and regression of graphs using various methods such as: graph edit distance, graph embeddings, graph kernels and graph neural networks.

gbrpr.org

GbR27

GbR is a biennial workshop sponsored by IAPR through TC15. Its main goal is to advance research in Pattern Recognition and Image Analysis through the framework of graph theory.

The event provides a dedicated forum to share and discuss work and applications at the intersection of pattern recognition, image analysis, machine learning, and graph theory.

The 15th GbR workshop will be held in Pisa, Italy, from June 9 to June 11, 2027.

Call for Papers

We are pleased to announce the first call for papers for the upcoming IAPR Workshop on Graph-Based Representations in Pattern Recognition.

Paper Submission Deadline is Jan 30, 2027. Topics include, but are not limited to:

Graph-based Pattern Recognition
- Graph learning, clustering, matching, and classification
- Graph similarity, distances, kernels, embeddings
- Graph signal processing and spectral methods
- Graph-based representations (images, shapes) and segmentation
- Statistical, probabilistic, and algorithmic graph theory
- Graph algorithms, combinatorial & geometric optimization
- Geometry processing and manifold learning

Deep Learning on Graphs
- Graph Neural Networks (architectures, expressivity, transformers, equivariance)
- Scalable, self-supervised, and foundation graph models
- Graph generative models (diffusion, flow, etc.)
- Robust, trustworthy, and fair graph ML (explainability, adversarial, privacy)
- Causal inference and reasoning on graphs

Applications
- Life sciences and medicine (bioinformatics, chemistry, health)
- Social and network analysis
- NLP, LLMs, and knowledge graphs
- Computer vision and geometric ML
- Recommender systems, security, physical sciences
- Data mining and general graph-based applications
- Benchmarks, datasets, libraries, and infrastructures

Proceedings

The proceedings of the workshop will be published in the *Springer LNCS* series, and we are currently in discussions with *Pattern Recognition Letters* to create a special issue related to GbR topics following the workshop.

General Chairs:
Alessio Micheli, *University of Pisa*
Domenico Tortorella, *University of Pisa*
Vincenzo Carletti, *University of Salerno*
Benoît Gaüzère, *INSA Rouen Normandie*

In this Issue

Click on the TC name to skip to their news

TC 20

IAPR TC20 Pattern Recognition for Bioinformatics and Digital Health

LinkedIn iapr.org/tc20

Chair: Arzucan Özgür (Boğaziçi University, Turkey)
Vice Chair: Fenglong Ma (Pennsylvania State University, USA)
Communication Officer: İnci M. Baytaş (Boğaziçi University, Turkey)

IAPR TC20 aims to pursue cutting-edge developments in pattern recognition for health and to encourage interdisciplinary collaborations at the intersection of pattern recognition and bioinformatics, biomedical informatics, and digital health analytics. The activities organized by TC20 enable a two-way knowledge transfer between pattern recognition and health domains.

TC 20 is organizing the 4th Pattern Recognition in Healthcare Analytics (PRHA) workshop, PRHA 2026, in conjunction with the 28th International Conference on Pattern Recognition (ICPR), and sponsored by the IAPR.

Scheduled for Aug. 22, 2026, the fourth PRHA workshop aims to continue showcasing the latest developments in pattern recognition for healthcare analytics. As an interdisciplinary domain, healthcare analytics encompasses a wide range of data-driven techniques applied to digital health data. Particularly, deep learning and machine learning frameworks are vital for various healthcare tasks, including risk prediction, disease progression modeling, subtyping and phenotyping, and medical image and text recognition.

Healthcare analytics tasks constitute various challenges due to the complex nature of digital patient data. Traditional deep learning and machine learning techniques do not inherently address the challenges in patient data that are often heterogeneous, distributed, non-linear, and temporal. Furthermore, interpretability and explainability have become inevitable requirements to consider while designing models to address bioinformatics and biomedical informatics tasks. In summary, the proposed workshop aims to showcase original ideas on predictive modeling, clustering, feature extraction, temporal analysis, data visualization, and interpretability for patient data in tabular, text, and image formats.

Contact: inci.baytas@bogazici.edu.tr

The scope of PRHA 2026 entails but is not limited to:

Bioinformatics

Phenotyping and Subtyping

Patient Monitoring & Machine Learning in Pervasive Healthcare

Temporal Modeling for Disease Progression

Interpretable Models for Clinical Decision Support

Privacy-preserving Techniques for Distributed and Sensitive Patient Data

Medical Image Analysis

Meeting Reports

Conferences, Workshops, & Summer/Winter Schools

Click on the banner image for an event to visit its website

Goals

ICPRAI serves scientists interested in Pattern Recognition and Artificial Intelligence and their applications by providing an international forum for exchange of knowledge and research experiences at the intersection of these fields.

Organizers

General Chair: Ching Y. Suen, *Concordia University, Canada*
Conference Chairs: Tristan Glatard, *Krembil Centre for Neuroinformatics, Canada*
Edmondo Trentin, *University of Siena, Italy*
Yuan Y. Tang *University of Macau, China*
Program Co-Chairs: Adam Krzyzak, *Concordia University, Canada*
Farida Cheriet, *University of Montreal, Canada*
Mounim El-Yacoubi, *University of Paris-Sud, France*
Umapada Pal, *Indian Statistical Institute, India*
Yue Lu, *East China Normal University, China*

Click and select Organizing Committee tab for Complete List of Organizers

ICPRAI 2026 Logistics & Data

CENPARMI Research Centre, Concordia University, Canada, June 15-18, 2026

Previous Editions
4th ICPRAI (2024) Jeju, South Korea
3rd ICPRAI (2022) Paris, France
2nd ICPRAI (2020) Zhongshan, China
1st ICPRAI (2018) Montreal, Canada

Submissions Received: **96**
Average of 2 reviewers per paper, blind review
Oral Presentations: **34 (35%)**
Poster Presentations: **38**

Host Sponser: CENPARMI, Concordia University, Canada
Endorsed by IAPR

20 Countries Represented

ICPRAI 2026 Program Highlights

4 Keynotes

Zoran Duric
(EiC of *Pattern Recognition*)
George Mason University,
Fairfax, Virginia, U.S.A
Perception of Automated Driving

Robert Fisher
(President of the IAPR)
Edinbourgh University, U.K.
What we do want from AI?

Laurence Likforman-Sulem
Institut Polytechnique
de Paris/Telecom Paris, France
From Handwriting to Engraved Byzantine Characters: A Deep Learning Journey Filled with Emotion

Xia Li
Concordia University, Canada
Development of Sustainable Cathode Materials in All-Solid-State Batteries

Before a Keynote Address by Zoran Duric

4 Competitions

- *Why do a lot more people know "AI" than "PR?"*
- *What role does PR play in AI applications?*
- *Do AI and PR really need guardrails?*
- *Should students use AI for homework and assignments and how is AI reshaping education, particularly higher education?*

Proceedings Info

Springer LNCS (see ICPRAI website.)

Join In! ICPRAI 2026 Research Commentary

The introduction of four competition topics related to AI and Pattern Recognition was new for our 5th ICPRAI. Seven papers related to the competitions will be published in the proceedings of our conference by Springer. This has the purpose of raising the profile and awareness of the important role of Pattern Recognition in the new world dominated by AI. Indeed, authors of these topics generated provoking discussions with comments on reasons for the high visibility of AI compared to PR based on perception and media propagation. The respective roles of PR and AI were also discussed, leading to the decision of 12 authors to collaborate and produce a new paper (under preparation now) on the (in)visibility of PR in a world dominated by AI. We sincerely hope that our work will help the general public to understand and appreciate more the importance of PR in the core of AI applications.

~ Ching Y. Suen

ICPRAM 2026

15th International Conference on Pattern Recognition Applications and Methods

Marbella, Spain — *2 - 4 March, 2026*

Goals

ICPRAM, the International Conference on Pattern Recognition Applications and Methods, is a major point of contact between researchers, engineers and practitioners working on Pattern Recognition and Machine Learning, both from theoretical and application perspectives.

Organizers

Conference Co-Chairs: Ana Fred *University of Lisbon, Portugal*
Maria De Marsico *Sapienza Universiy of Rome, Italy*

Program Co-Chairs: Modesto Castrillon-Santana *U. of Las Palmas de Gran Canaria, Spain*
Daniel Riccio *University of Naples, Federico II, Italy*

Click for Complete List of Organizers

ICPRAM 2026 Logistics & Data

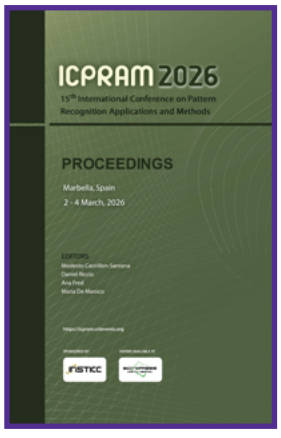
Barceló Marbella Hotel, Marbella, Spain, Mar 2-4, 2026

37 Countries Represented

Submissions Received: **100**
Double-blind review with at least 2 reviewers per paper.
Ratings based on Relevance, Originality, Technical Quality, Significance and Presentation
Oral Presentations: **60 (60%)**
Poster Presentations: **19**

In cooperation with AAAI, ACM SIGAI, SAAI, INNS, EURASIP, and EAB; Technical Co-sponsor IEEE Computational Intelligence Society

Sponsored by INSTICC and Endorsed by IAPR



Proceedings by SCITEPRESS Digital Library available here

ICPRAM 2026 Program Highlights

Keynotes

IAPR Distinguished Speaker
Guoying Zhao
University of Oulu, Finland
Seeing the Heartbeat:
Remote Physiological Signal Measurement and Applications Using Facial Videos

Antonio Loquercio
University of Pennsylvania, USA
Simulation: What Made us Intelligent Will Make our Robots Intelligent

Foteini Simistira Liwicki
Lulea University of Technology, Sweden
I Know What You Are Thinking:
A Journey from Symbols to Minds

Massimo Tistarelli
University of Sassari, Italy
30 Years of Face Recognition Research:
A Vision Ahead

Social and Cultural Programs

Participants enjoyed An Authentic Andalusian Night in Cortijo de Cortes

Best Paper Award
Sensor Generalization for Adaptive Sensing in Event-Based Object Detection via Joint Distribution Training
Aheli Saha, René Schuster, and Didier Stricker

Best Student Paper Award
Assessing Reconstruction Techniques for Estimating Evapotranspiration Time Series Under Varying Data Availability
José Ramón Torres-Martín, Yolanda Carrión-García, José Manuel Velarde-Gestera, Mihaela I. Chidean, and Inmaculada Mora-Jiménez

Best Poster Award
The Hidden Price Tag behind LLMs and Their Environmental Cost
Nermeen Abou Baker and Uwe Handmann

Best Industrial Paper Award
DisasterSynth: High-Resolution Disaster Scene Generation and Reliable Pseudo Labeling with Masked Feature Reconstruction
Wang Yubo, Ishii Hiroyuki, and Ohya Jun

Join In! ICPRAM Research Commentary

As ICPRAM is a conference encompassing theory, methods, and applications, several topics are addressed at different levels of abstraction and detail. Discussions, stimulated by the presentations, range from methodological issues to practical concerns to ethical problems.

One of the many interesting questions discussed during the conference was the relationship between simulation and perception of the real world. According to Aristoteles, perception is, in a sense, the reception of the form of perceived objects without their matter. It is a representation of input from the world, which should be evaluated to plan actions. However, decisions about actions should be based not only on perception but also on the hypothesized consequences of those actions. Simulation can improve the quality of the hypotheses.

Because AI is changing our way of life from different perspectives, it is becoming increasingly important to explore its possible limitations. A first issue to consider is the amount of data needed by the advanced models used in many applications. Collecting such large amounts of data can raise issues of privacy, security, and intellectual property. On the other hand, the use of synthetic data to address the problem must be carefully considered in light of potential bias from hallucination and imprecise inference. Another importan issue to consider is the resource consumption, with special attention to different energy production scenarios.

Another intersting topic related to the use of AI is whether it lacks democracy and, if so, in which aspects. The concentration of power leads to uneven access to resources and data, and the latter can be collected without the involved population's awareness. Continued surveillance ensures security but causes loss of privacy. Last but not least, manipulation of information can lead to a lack of awareness of real facts and events, especially in relation to the above-mentioned power concentration. One of the tasks of present and future researchers is to take AI ethics into account, and not only its performance.

~ Maria De Marsico, Modesto Castrillon-Santana, and Daniel Riccio

VISAPP 2026

21st International Conference on Computer Vision Theory and Applications

Marbella, Spain 9 - 11 March, 2026

Goals

The International Conference on Computer Vision Theory and Applications (VISAPP) aims to be a major point of contact between researchers, engineers and practitioners in the area of computer vision methods, systems and applications. Tracks cover all aspects of computer vision, including: Foundations & Representation Learning; Recognition & Detection; Low-level Vision & Computational Imaging; and 3D Vision, Motion, Robotics, Application & Systems.

Organizers

Conference Chair: Petia Radeva *University of Barcelona, Spain*

Program Chair: Antonino Furnari *University of Catania, Italy*

Click for Complete List of Organizers

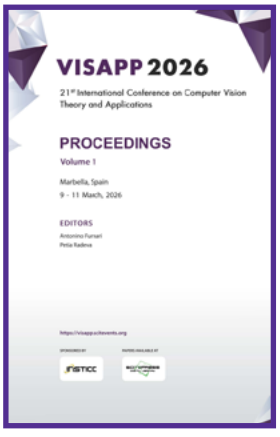
VISAPP 2026 Logistics & Data

Barceló Marbella Hotel, Marbella, Spain, Mar 9-11, 2026

42 Countries Represented

Submissions Received: **326**
Double-blind review with at least 2 reviewers per paper.
Ratings based on Relevance, Originality, Technical Quality, Significance and Presentation
Oral Presentations: **185 (57%)**
Poster Presentations: **70**

In cooperation with ACM SIGAI and the Society for Imaging Science and Technology
Sponsored by INSTICC and Endorsed by IAPR



Proceedings by SCITEPRESS Digital Library available here

Opening Session

VISAPP 2026 Program Highlights

Keynotes

Elisa Ricci
University of Trento, Italy
Rethinking Multimodal AI Models: Beyond Accuracy, Towards Trust

Yuki Asano
University of Technology Nuremberg, Germany
Self-Supervised Learning Is Dead, Long Live Self-Supervised Learning (in the Age of MLLMs)

Cees G. M. Snoek
University of Amsterdam, Netherlands
Seeing, Speaking, and Reasoning in a Visual World

Social and Cultural Programs

Participants enjoyed An Authentic Andalusian Night in Cortijo de Cortes

Best Paper Award

ShareDAB-DETR: Memory-Efficient Object Detection through CentralBank Parameter Sharing
Khaled Chikh, Roberto Cavicchioli, and Alessandro Capotondi

Best Student Paper Award

FutrTrack: A Camera-LiDAR Fusion Transformer for 3D Multiple Object Tracking
Martha Teiko Teye, Ori Maoz, and Matthias Rottmann

Tutorials (details here.)

Seeing Through the User's Eyes: Advances in Human-Centric Egocentric Vision
Instructor: Francesco Ragusat

Advanced Methods for Visual Information Retrieval and Exploration in Large Multimedia Collections
Instructor: Kai Uwe Barthel

Optimizing 3D Scene Representations: From Gaussian Splatting Compression to Self-Organizing Grids
Instructors: Peter Eisert and Kai Uwe Barthel

Join In! VISAPP Research Commentary

A central research question explored during a panel session was whether the perceived trade-off between AI safety and model performance is a genuine conflict or a "false dichotomy." Additionally, the discussion examined Explainable AI (XAI) in the context of modern generative models: specifically, whether the conversational capabilities of Large Language Models (LLMs) genuinely mitigate traditional "black box" concerns, or if a machine's linguistic explanations are inherently insufficient or potentially misleading.

The general consensus highlighted that evaluating AI strictly on traditional performance metrics is no longer sufficient; real-world deployment demands a deep understanding of model behavior under constraints like uncertainty, bias, and privacy. The panel emphasized that useful AI cannot be achieved without paying close attention to safety and trustworthiness. While LLMs and Generative AI successfully augment analytical layers, relying solely on their natural language outputs for explainability remains risky. To fully bridge this gap, the community requires standardized, automatic benchmarking frameworks for robust evaluation, alongside scalable approaches for automated bias discovery and mitigation.

Exciting future directions involve shifting beyond mere accuracy toward principled, socially aligned AI systems for the next generation of smart technologies. This includes foundational work in uncertainty quantification for reliable decision-making and privacy-based learning, such as machine unlearning and federated learning. Furthermore, adopting a mixed-initiative process—where both human intuition and AI systems drive the analysis—promises more effective and transparent problem-solving, particularly when combining generative models with guidance-enriched visual analytics.

~ Antonino Furnari

ROBOVIS 2026

6th International Conference on Robotics, Computer Vision and Intelligent Systems

Marbella, Spain 2 - 4 March, 2026

Goals

Robotics is closely connected to Computer Vision and Intelligent Systems. Research and development of robots require technologies originating from the other two areas; research in Computer Vision is often driven by needs in Robotics; Intelligent Systems models and software are often aimed at applications in the areas of physical agents, i.e. robots, or in domains related to scene understanding, video and image processing, and many other aspects of Computer Vision. ROBOVIS is a venue where these three research communities, often isolated, meet and discuss innovation possibilities driven by the intersection of these highly synergetic fields.

Organizers

Conference Chair: Joaquim Filipe *Polytechnic Institute of Setubal, Portugal*

Program Co-Chairs: Juha Röning *University of Oulu, Finland*
Luís Paulo Reis *University of Porto, Portugal*

Click for Complete List of Organizers

ROBOVIS 2026 Logistics & Data

Barceló Marbella Hotel, Marbella, Spain, Mar 2-4, 2026

11 Countries Represented

Submissions Received: **42**
Double-blind review with at least 2 reviewers per paper.
Ratings based on Relevance, Originality, Technical Quality, Significance and Presentation
Oral Presentations: **19 (45%)**
Poster Presentations: **7**

In cooperation with ACM SIGAI
Technically Co-sponsored by IEEE SMC-TC on Robotics and Intelligent Sensing
Sponsored by INSTICC and Endorsed by IAPR

Proceedings

Springer *CCIS*, linked here

ROBOVIS 2026 Program Highlights

Keynotes

Bruno Siciliano
University of Naples Federico II, Italy
Robot Manipulation and Control

Angel P. Del Pobil
Jaume I University, Spain
Robot AI and Human Safety

IAPR Distinguished Speaker
Antonio Loquercio
University of Pennsylvania, USA
Simulation: What Made us Intelligent Will Make our Robots Intelligent

Awards

Best Paper Award
Generating Human-Understandable Descriptions of Novel Objects for Verbal Interactions with Edge-Based Robots
Sarah Schneider, Evan Krause, Marlow Fawn, Doris Antensteiner, Csaba Beleznai, Daniel Soukup, and Matthias Scheutz

Best Poster Award
Emerging Multi-Robot Cooperation through Action Selection Robust to Communication Disruptions
Erwan Martin, Antoine Nongaillard, and Philippe Mathieu

Social and Cultural Programs

Participants enjoyed An Authentic Andalusian Night in Cortijo de Cortes

Join In!
ROBOVIS Research Commentary

The central question is: How can robots reliably transfer skills learned in simulation to the real world? Simulations consist of abstractions and approximations that inevitably introduce discrepancies between simulated and real environments—known as the “reality gap”—and these discrepancies significantly hinder the successful transfer of robotic systems from simulation to deployment. IAPR Distinguished Keynote Speaker Antonio Loquercio’s distinctive angle is reframing this engineering challenge through an evolutionary biology lens, asking whether the way simulation shaped intelligence in biological systems (specifically via the mammalian neocortex) can offer principled guidance for making sim-to-real transfer a true scientific discipline rather than an empirically tuned art.

Several techniques have emerged as leading responses to the reality gap. Domain randomization, real-to-sim transfer, state and action abstractions, and sim-real co-training have all demonstrated promising results across locomotion, navigation, and manipulation. Loquercio’s own lab contributed foundational work here: He and collaborators successfully transferred a racing drone policy trained in simulation using domain randomization to a physical platform without any fine-tuning. There is broad consensus that these methods work empirically, but no consensus yet on why they work or what their theoretical limits are. Despite the empirical successes of domain randomization in particular, theoretical understanding of why this simple algorithm works remains limited.

The most exciting frontier is the rise of world foundation models as richer simulation substrates. Major efforts from DeepMind (Genie 3), NVIDIA (Cosmos), Meta (V-JEPA 2), and Wayve (GAIA-2) are now producing generative space-time simulators aimed at closing the reality gap for robotics and autonomy. Loquercio’s own biological reframing points toward a complementary direction: understanding what properties a simulation must have to produce genuinely transferable intelligence—echoing how the neocortex appears to run predictive, generative models of the world rather than memorizing specific environments. At the heart of his research is a fundamental question about what the true purpose of perception is in autonomous systems—a question that, if answered, could elevate sim-to-real transfer from a set of heuristics into a grounded theory

~ Joaquim Filipe (slightly modified from the keynote lecture by Antonio Loquerico)

IAPR BULLETIN BOARD
FOR ITEMS OF GENERAL INTEREST TO PATTERN RECOGNITION FOLKS

REMEMBER!

You will note; we have plenty of thumbtacks.

Your news could be here...

Notice:
If you have news, ads, or information to share with the IAPR community on our Newsletter Bulletin Board, please send it to:

CAROLYN BUCKLEY

cab @ sayitbetterscience

Clickable !

Congratulations, Event Organizers!

Not only did you organize a successful conference, but you no longer have to write a lengthy report for the *IAPR Newsletter*! Just click here instead and answer the questions!

Clickable !

... or here.

We can even add another bulletin board.

Meeting and Education Planner

Month	Days	Meetings, Workshops & Schools	Previous edition & link to Report	Venue	Paper/ Application Deadline
= Sponsored by IAPR		**2026**			
Aug	17-22	ICPR 2026 28th International Conference on Pattern Recognition	2024	Lyon **France**	closed
	21	AIHA 2026 4th International Workshop on Artificial Intelligence for Healthcare Applications	2024	Lyon **France**	closed
		IMTA X 2026 10th IAPR TC16 Workshop on Image Mining, Theory and Applications	2024	Lyon **France**	closed
		MPRSS 2026 8th IAPR TC9 Workshop on Multimodal Pattern Recognition for Social Signal Processing in Human Computer Interaction	2024	Lyon **France**	closed
		PRESTIGE 2026 1st IAPR TC19 Workshop on Pattern Recognition and Computer Vision for e-Heritage and Digital Humanities		Lyon **France**	closed
		PRRS 2026 14th IAPR TC7 Workshop on Pattern Recognition in Remote Sensing	2024	Lyon **France**	closed
		RRPR 2026 6th IAPR TC22 Workshop on Reproducible Research in Pattern Recognition	2024	Lyon **France**	closed
	22	MANPU 2026 7th International Workshop on coMics ANalysis, Processing and Understanding	2024	Lyon **France**	closed
		PRHA 2026 4th IAPR TC20 International Workshop on Pattern Recognition in Healthcare Analytics and Bioinformatics	2024	Lyon **France**	closed
		XAIE 2026 4th Workshop on Explainable and Ethical AI	2024	Lyon **France**	closed
	24-26	S+SSPR 2026 Joint IAPR International Workshops on Statistical Techniques in Pattern Recognition and Structural and Syntactic Pattern Recognition	2024	Bern **Switzerland**	closed
Aug-Sept	30-4	ICDAR 2026 20th International Conference on Document Analysis and Recognition	2024	Vienna **Austria**	closed
Sept	1-4	IJCB 2026 IEEE/IAPR International Joint Conference on Biometrics	2025	Rome **Italy**	closed
	3-4	DAS 2026 17th International Workshop on Document Analysis Systems	2024	Vienna **Austria**	closed
Oct	7-9	ANNPR 2026 12th TC3 Workshop on Artificial Neural Networks in Pattern Recognition	2024	Milan **Italy**	closed

continued on next page...

Meeting and Education Planner

Month	Days	Meetings, Workshops & Schools	Previous edition & link to Report	Venue	Paper/ Application Deadline
= Sponsored by IAPR		**2026** ...continued			
Nov	24-27	CIARP 2026 29th Iberoamerican Congress on Pattern Recognition	2025	CDMX **Mexico**	closed
Dec	9-12	CVIP 2026 11th International Conference on Computer Vision and Image Processing	2024	Calicut **India**	July 31 2026 (Round 2)
= Sponsored by IAPR		**2027**			
Mar	8-11	ICPRS 2027 16th International Conference on Pattern Recognition Systems	2025	Talence (Bordeaux) **France**	Oct 25 2026
Jun	8-11	SCIA 2027 Scandinavian Conference on Image Analysis	2025	Gjovik **Norway**	Jan 26 2027
Sep	13-17	IJCB 2027 2027 IEEE/IAPR International Joint Conference on Biometrics	2025	Foz do Iguacu **Brazil**	Apr 10 2027
Oct	4-6 & 14-15	ICPRv 2027 International Conference on Pattern Recognition Virtual		**Online**	Mar 1 2027

IAPR NEWSLETTER SUBMISSION DEADLINES FOR OCTOBER 2026

Sunday	Monday	Tues	Wed	Thurs	Friday	Saturday
Sep 27	Sep 28 *Invited Next Gen, 50 Years Essays Due*	Sep 29	Sep 30	Oct 1	Oct 2 *Invited Getting to Know IAPR Fellows Essay Due*	Oct 3
Oct 4	Oct 5 *New ads, plus...* ***All Meeting Reports! ALL Meeting Reports! ALL MEETING REPORTS***	Oct 6	Oct 7	Oct 8	Oct 9 *Standing Committee Columns/News, Technical Committee News, Changes to existing ads*	Oct 10
Oct 11	Oct 12 *From the ExCo Essay and News Points*	Oct 13	Oct 14	Oct 15	Oct 16 *Conference Calls for Papers, Proposals, & Applications*	Oct 17
Oct 18 through Oct 24: ***Final Copy Draft and Review Week (New materials can no longer be accepted)***						
Oct 25	Oct 26 *Publication Day (Planned)*	Oct 27	Oct 28	Oct 29	Oct 30	Happy Halloween!

Wondering when to send new or unlisted content? Please contact the Layout Editor by Sep 15, 2026

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Please email comments or ideas to EiC or LE! Thank you!