Special Track - Image Processing and Machine Vision for Intelligent Healthcare

The IEEE CBMS 2026 Special Track on Image Processing and Machine Vision for Intelligent Healthcare focuses on the convergence of artificial intelligence, computer vision, and biomedical imaging to address challenges in modern healthcare. Over the past decade, deep learning and image understanding have revolutionized the way clinicians diagnose, monitor, and treat diseases — from early detection in radiology to precision-guided surgeries and real-time patient monitoring. This special track aims to bring together researchers, clinicians, engineers, and industry experts to discuss breakthroughs and emerging trends that empower medical imaging systems with intelligence, efficiency, and interpretability. It will serve as a venue to present novel algorithms, architectures, and applications that push the limits of visual computing in healthcare — emphasizing accuracy, explainability, and adaptability for real-world clinical environments. The track particularly encourages contributions that explore lightweight and TinyML-based models for embedded healthcare devices, federated and privacy-preserving learning, and real-time image or video analysis for diagnostic and monitoring systems. By connecting academia and industry, this track aims to strengthen collaboration toward AI-driven, patient-centered healthcare innovation.

SUBMISSION

Papers must be submitted electronically using the EasyChair conference management system. **Link:** https://easychair.org/conferences/?conf=ieeecbms2026. All submissions will be peer-reviewed at least by two Program Committee members. All accepted papers (Regular, Short, and Posters) will be included in the conference proceedings and will be published by IEEE Xplore. Publication in proceedings is conditioned to the registration and presentation of the paper at the conference by one of the authors Each contribution must be prepared following the IEEE two-column format, whose template is available at IEEE Template. The authors may choose LaTeX or Microsoft Word templates. CBMS 2026 accepts three types of submissions:

- Regular papers: The length of the contribution is limited to 6 pages, but it is possible to extend the paper length up to 8 pages by paying for each extra page. Check fees for more information.
- Short papers: The length of the contribution is limited to 4 pages and no less than 3 pages, not being possible to extend the paper length. The duration of the oral presentation of short posters will be less than regular ones.
- Posters: The length of the contribution is limited to 2 pages. Poster papers will be included in the proceedings but won't include oral presentations during the conference. The authors of a poster also need to prepare a real poster to be shown during the conference. For presentation purposes at the conference, the authors must prepare the poster in portrait format. The accepted dimensions are 60 (width) x 80 (length).

ORGANIZERS

Abdussalam Elhanashi, University of Pisa, Italy

Massimiliano Donati, University of Pisa, Italy

PROGRAM COMMITTEE

Qinghe Zheng, Shandong Management University, China

Sergio Saponara, University of Pisa, Italy

Pierpaolo Dini, University of Pisa, Italy

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Shiba Kuanar, Mayo Clinic, Rochester, MN, USA

Khaled Younis, MedAiConsult, USA

Shahriar Faghani, Mayo Clinic, Rochester, MN, USA

Nicola Vanello, University of Pisa, Italy

Mario Cimino, University of Pisa, Italy

IMPORTANT DATES

- Paper Submission Deadline: **February 20, 2026**
- Notification of Acceptance: **April 10, 2026**
- Camera-Ready Submission: **April 24, 2026**
- Conference Dates: **June 03–05, 2026, Limassol, Cyprus**

CALL FOR PAPER

The organizers invite the submission of original, high-quality research papers covering all aspects of image processing and machine vision for intelligent healthcare, including but not limited to:

- Biomedical image segmentation, detection, and classification
- Deep learning architectures for medical imaging (CNNs, Transformers, GANs)
- Radiomics and radiogenomics
- Explainable and trustworthy AI in medical imaging
- Vision-based disease detection and monitoring
- 3D and multimodal medical image reconstruction
- Video analysis and real-time image processing
- Lightweight and Tiny models for medical edge devices
- Image fusion and clinical decision support
- AI in pathology, radiology, ophthalmology, and cardiology
- Federated and privacy-preserving learning for medical imaging
- Smart cameras and IoT-based healthcare vision systems

VENUE

St. Raphael Resort, Limassol, Cyprus

CONTACT

Email: ieeecbms2026@easychair.org

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