



Preliminary call for papers

Dear All,

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

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

GbR is a biennial workshop organized by the 15th Technical Committee of IAPR, aimed at encouraging research works in Pattern Recognition and Image Analysis within the graph theory framework.

This workshop series traditionally provides a forum for presenting and discussing research results and applications in the intersection of pattern recognition, image analysis on one side and graph theory on the other side.

The scope of GbR2027 includes, but is not limited to, the following topics:

- 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

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

Important dates

- Paper submissions: 30 January 2027
- Early Registration: 30 April 2027

Please do not hesitate to submit papers and join us for three days of intense scientific activity in a warm atmosphere.

For more and updated information please visit the website <https://www.gbrpr.org>

Regards,

Alessio Micheli, Domenico Tortorella, Vincenzo Carletti, Benoît Gaüzère.