# Thematic Special Issue of Pattern Recognition Letters on Applications of Graph-based Techniques to Pattern Recognition (AppGTPR)

## Motivations and topics

Graph-based representation and learning/inference algorithms have been widely applied to structural Pattern Recognition and to image analysis, including applications such as image segmentation, shape recognition, scene parsing, document analysis, social network mining, and many others. On the other hand, the application needs in network era have posed new challenges to graph-based pattern recognition, such as matching for large graphs, automatic learning of graph models, inference in graphical models incorporating multi-source knowledge and contexts, applications to practical large and noisy data, and so on.

The special issue is aimed to present novel or challenging applications of graph-based techniques in pattern recognition, computer vision and data mining. The topics include, but are not limited to:

- Graph-based processing for 2D and 3D images
- Graph methods for scene analysis and behaviour recognition
- Graph-based Pattern Recognition in document analysis
- Graph-based Pattern Recognition in chemistry and bioinformatics
- Graph-based Pattern Recognition in social network analysis

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## TC15 Endorsement

The IAPR Technical Committee #15 on Graph-based Representation in Pattern Recognition fully supports and promotes this Special Issue, and will use its web site and its mailing list to give visibility to its publication.

## Important dates

Paper Submission:                        October 15, 2017
First-round notification:                December 31, 2017
Revised manuscript submission:           February 15, 2018
Notification of final decision:          March 15, 2018
Tentative publication date:              Third quarter of 2018

## Submission instructions

Prospective authors are invited to submit their manuscripts electronically after the "open for submissions" date (September 1, 2017) and until the submission deadline (October 15, 2017), adhering to the PRL guidelines. When submitting the papers through the online EES system (https://ees.elsevier.com/prletters/) choose as article type AppGTPR to submit to this Special Issue. Submitted manuscripts should not have been published previously, nor be under consideration for publication elsewhere. If the submission is an extended work of the previously published paper, please include the original work and a cover letter describing the changes that have been made.