

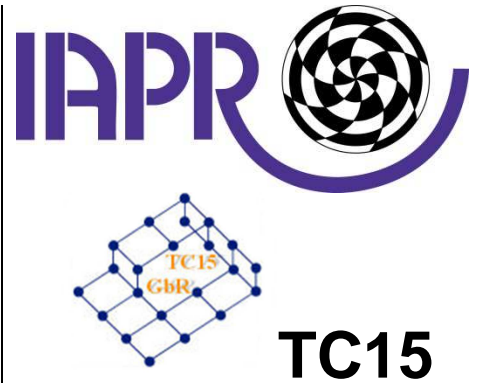
Dear TC15 members,

Welcome to the July edition of our newsletter. We will now try to send a TC15 newsletter regularly so feel free to send us some information to publish in these newsletters.

Remember that you can also find up-to-date information about our community on our web site (<https://iapr-tc15.greyc.fr/index.php>) or use our rss feed (<https://iapr-tc15.greyc.fr/rss.php>).

Best regards

Jean-Yves Ramel & Donatello Conte  
TC15 newsletter editors



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## GbR 2015 report

### 10th IAPR Workshop on Graph-based Representations in Pattern Recognition

Beijing, China, May 13-15, 2015

<http://www.nlpr.ia.ac.cn/gbr2015/>

Co-Chairs: Cheng-Lin Liu, Bin Luo, Walter Kropatsch

The 10th IAPR Workshop on Graph-based Representations in Pattern Recognition (GbR) was held at the Institute of Automation of Chinese Academy of Sciences (CASIA) on May 13-15, 2015. The workshop was sponsored by the International Association for Pattern Recognition (IAPR), and hosted by the National Laboratory of Pattern Recognition of CASIA.

GbR is a workshop organized by the 15th Technical Committee of IAPR (IAPR TC-15), aimed at encouraging research works in Pattern Recognition and Image Analysis within the graph theory framework. This workshop series, held every two years, traditionally provides a forum for presenting and discussing research results and applications in the intersection of pattern recognition, image analysis and graph theory. Recently, graph-based structural models and probabilistic graphical models have been widely applied to pattern recognition, computer vision, machine learning and data mining.

The GbR2015 is the 10th in the series, and is the first time to be held in area outside Europe. It received 53 submissions, in which 36 were accepted for presentation after peer review. 33 program committee members and 12 additional reviewers were invited to review submissions. Each submission was assigned to three reviewers. The accepted papers were presented in nine oral sessions, each paper given 25min for presentation and discussions. There were also two IAPR invited speeches. Professor Marcello Pelillo, University of Venice University, Italy, addressed a speech titled Revealing Structure in Large Graphs: Szemerédi's Regularity Lemma and Its Use in Pattern Recognition. Dr. Xing Xie, Microsoft Research Asia, Beijing, China, addressed a speech titled Understanding Users by Connecting Large Scale Social Graphs.



More than 50 participants attended the GbR2015, including 20 students. The organizing committee offered stipends to six students from Europe, including four Class A stipends which waive registration fee and offer accommodation, and two Class B stipends which offer accommodation only.

The proceedings of GbR2015 were published by Springer in Lecture Notes in Computer Sciences, Vol.9069, <http://link.springer.com/book/10.1007%2F978-3-319-18224-7>.

## **Last News from TC15**

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### **Website updates**

We are planning to incrementally establish a database of graph-related publications on TC15 homepage. It is intended to collect the relevant and important publications related to the topics of TC15, including those from the TC members. This will be beneficial to the future research in this field and also help increase the visibility of TC15 and their members' research work.

### **Plans**

A Special Issue "Advances in Graph-based Pattern Recognition" will be published in Pattern Recognition Letters in 2016 (see Next Section).

In collaboration with TC10/TC11 a contest is planned at ICPR2016 to apply graph-based methods to solve challenging problems from the document analysis domain.

The 11th GbR Workshop will be held in South of Italy in 2017.

## **One new graph matching dataset for evaluation of GED methods**

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The GDR4GED repository (provided by the Laboratoire Informatique de Tours - France): <http://www.rfai.li.univ-tours.fr/PublicData/GDR4GED/home.html>

To precisely evaluate the accuracy of graph edit distance (GED) methods, Ground-Truth with information about the quality of the matching between pairs of graphs (low level information) is required in addition to higher level information (label of the object represented by the graph, classification rates) usually provided

and used as GT to evaluate the methods. Most of the publicly available graph repositories with associated ground-truths are dedicated to evaluating graph classification or exact graph matching methods and so the matching correspondences as well as the distance between each pair of graphs are not directly evaluated. This dataset called GDR4GED consists of a graph database repository annotated with low level information like graph edit distance values (optimal and sub-optimal) and also their corresponding node-to-node matchings (edit paths). A set of performance evaluation metrics that can be computed using this dataset to assess the performance of GED methods is also proposed in the conference paper (GbR2015) describing this repository (available with the repository).

This dataset and many other ones are available on the **TC15 web site** (<https://iapr-tc15.greyc.fr/index.php>)

## Call for papers

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### Special issue on Graph-based Pattern Recognition

Connected with GbR2015 workshop, a special issue on Graph-based Pattern Recognition will be published at Pattern Recognition Letters. The Call for Papers is now available at

<http://www.journals.elsevier.com/pattern-recognition-letters/call-for-papers/special-issue-on-advances-in-graph-based-pattern-recognition/>

You are warmly welcome to submit your work to this special issue.

Best regards,

Cheng-Lin Liu

Bin Luo

Walter Kropatsch

Guest Editors, Special Issue

General Chairs, GbR2015

Important dates:

Paper Submission due: November 15, 2015

Tentative first review notification: February 15, 2016

Tentative revision submission: April 28, 2016

Tentative acceptance notification: June 15, 2016

## ICPR 2016

23rd International conference on Pattern Recognition

Dec 4-8, 2016, Cancun, Mexico

*Organizing Committee*

General Chair: Prof. Eduardo Bayro-Corrochano (CINVESTAV, Mexico)

Co-Chairs: Prof. Gerard Medioni (USC, USA), Prof. Gabriella Sanniti di Baja (CNR, Italy)

<i>Tracks</i>	<i>Important Dates</i>	
Track 1: Pattern Recognition and Machine Learning	Deadline for submissions	May 2, 2016
Track 2: Computer Vision and Robot Vision	Notification of acceptance	Jul 11, 2016
Track 3: Image, Speech, Signal and Video Processing	Camera-Ready	Sep 5, 2016
Track 4: Document Analysis, Biometrics and Pattern	Tutorial/workshop proposal	Apr 1, 2016
Track 5: Biomedical Image Analysis and Applications	Contest proposal	Sep 5, 2016

Website : [www.icpr2016.org](http://www.icpr2016.org)