TC10
Technical Committee on Graphics Recognition

Newsletter   N°128

January 2018

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Call for Contributions

Please contribute relevant news to TC10 groups.

Please send any relevant event, notice or link to the newsletter editor : Motoi Iwata.

Message from the editor

Welcome to the January edition of the TC10 newsletter.
First of all, we would like to thank the local organizers for the wonderful ICDAR. We all could enjoy a great ICDAR conference, tutorials and workshops. The pictures of the event are available here:
http://u-pat.org/ICDAR2017/album/index.html

The GREC and MANPU organizers would like to thank the participation to the workshops. In this edition you will find information concerning the GREC-LNCS postproceedings submission.
Finally, you will also find the next call for papers, the call for hosting the TC10/TC11 summer school and the job offers.
Happy New Year 2018!!

Follow us at twitter:
https://twitter.com/IAPR_TC10.
Motoi Iwata, IAPR-TC10 Newsletter Editor.

GREC 2017 - LNCS post-proceedings

Twelfth IAPR International Workshop on Graphics Recognition (GREC 2017)
http://grec2017.loria.fr/

The GREC workshop was, as usual, a great opportunity for researchers to meet colleagues and to share new ideas and knowledge about graphics recognition methods. In this edition, 27 papers were presented, followed by highly interactive discussions, even though the first day hosted a record-breaking 110 participants. The GREC organizers would like to thank all participants, since we could indeed enjoy a highly interactive GREC workshop, with many fruitful discussions concerning graphics recognition topics.

Post-proceedings
As in previous editions, after the workshop, authors have the opportunity to submit an extended and revised paper for full single-blind review and subsequent publication at Lecture Notes in Computer Science (LNCS), Springer.
Please be aware that acceptance for presentation at the workshop does not guarantee acceptance and publication in the post-proceedings.

Dates
- Post-proceedings submission: **March 5, 2018**.
- Post-proceedings acceptance notification: **May 6, 2018**.

More information available at the GREC website:

http://grec2017.loria.fr/submission-guidelines/lncs-post-proceedings-submission-guidelines/

The GREC 2017 organizing committee

IJDAR Discount for IAPR Members (repost)

IAPR is pleased to announce a partnership agreement with Springer, the publisher of IJDAR, the International Journal on Document Analysis and Recognition. This new agreement will allow IAPR members to receive a subscription to the electronic version of IJDAR at a discount of nearly 50%. For additional details, see the links below:
- http://www.iapr.org/publications/intjournal.php
- http://www.iapr.org/publications/intjrnlsub.php

KOICHI KISE, DANIEL LOPRESTI AND SIMONE MARINAI, IJDAR EDITORS-IN-CHIEF
(kise@cs.osakafu-u.ac.jp, lopresti@cse.lehigh.edu, simone.marinai@unifi.it).

IJDAR articles alert

Volume 20, Issue 4
https://link.springer.com/journal/10032/20/4/page/1

- A restoration method for distorted comics to improve comic contents identification.
  Sang-Hoon Lee, Doyoung Kim, Sagar Jadhav, Sanghoon Lee

- Character segmentation and transcription system for historical Japanese books with a self-proliferating character image database
  Chulapong Panichkriangkra, Liang Li, Takaaki Kaneko, Ryo Akama, Kozaburo Hachimura

- Recognition of handwritten Lanna Dhamma characters using a set of optimally designed moment features.
  Papangkorn Inkeaw, Phasit Charoenkwan, Hui-Ling Huang, Sanparith Marukatat, Shinn-Ying Ho, Jeerayut Chaijaruwanich

Call for Hosting the TC10/TC11 Summer School

Part of the mission of IAPR TC11 and TC10 is to promote high quality educational activities related to Reading Systems and Graphics Recognition. Responding to this need, TC10 and TC11 have decided to establish a bi-annual series of summer schools. After the successful organization of the first summer school in Jaipur, India, we are now are soliciting proposals for the organisation of the second "IAPR TC10/TC11 Summer School on Document Analysis" in 2018 or early 2019.

The "IAPR TC10/TC11 Summer School on Document Analysis" is intended to become the prime educational activity of IAPR TC11 (Reading Systems) and TC10 (Graphics Recognition). The School is meant to be a training activity where participants are exposed to the latest trends and techniques of Reading Systems and Graphics Recognition.

The aim of the School is to provide both an objective and clear overview and an in-depth analysis of the state-of-the-art research in selected topics of Reading Systems and Graphics Recognition. The School should aim to provide a stimulating opportunity for young researchers and Ph.D. students in the field.

Individuals and groups who are interested in Reading Systems and Graphics Recognition are invited to submit proposals for organizing and hosting the 2018 IAPR TC10 / TC11 Summer School. As the last summer school was organized in Asia, organizing teams from Europe or the Americas are encouraged to submit a bid in order to facilitate the envisioned rotational scheme of the IAPR TC10 / TC11 Summer School.

It is expected that proposers familiarise themselves with the guidelines for organising the School first, to fully plan their bid. The Guidelines can be found at the TC11 Web site:

The submission of a bid implies full agreement with the rules and procedures for organising the School. Especially, this means that organizers will apply for IAPR support and that the event will use the series title "IAPR TC10/TC11 Summer School on Document Analysis" with an optional sub-title denoting a special focus of the respective event.

Important Dates
- Proposal Submission : Jan. 31, 2018

Proposals should be sent to:
- Gernot A. Fink, TC-11 Education Officer, gernot.fink@udo.edu
- Syed Saqib Bukhari, TC-10 Educational Officer, saqib.bukhari@dfki.de

Job offers : PostDoc position, on Graph Kernel for Chemoinformatics at LITIS, Rouen, France

Postdoc position on Graph Kernel for Chemoinformatics at LITIS - Rouen, France

Keywords: machine learning on graphs, chemoinformatics, graph kernels, graph representations

Graph kernels can be understood as graph similarity measures corresponding to scalar products between graph's projections in an implicit (and possibly unknown) Hilbert space. On one hand, graph kernels can be used in any kernel method, thanks to the underlying implicit embedding. On the other hand, relaxing the constraints associated to explicit vectorial representations of graphs limits the loss of structural information. Therefore, graph kernels allows to encode more structural information than classic graph embedding methods while being able to connect to powerful machine learning methods.
Graph kernels have been defined on molecular graphs and applied to chemoinformatics to build prediction models using the structural information encoded within molecular compounds. However, intrinsic properties of atoms and theirs interactions induce some electronic properties which are not explicitly encoded within classic molecular graphs representations. The main purpose of this post doctoral position is to include this information into a new augmented kernel and apply it on some chemoinformatics datasets. The two main steps will be i) to define a new molecular representation encoding local electronic information and ii) to define a new similarity measure as a kernel to compare two molecules encoded in the new proposed representation.
This project will be supervised in close collaboration by LITIS (Rouen, France) and GREYC (Caen, France) laboratories which have a strong expertise on graph kernels for chemoinformatics. The chemical part will be supervised by COBRA laboratory (Rouen, France) which has proposed various atomic descriptors encoding some electronical information. Their expertise will be essential to be able to encode additional information into a new representation for chemical compounds.

Position Details
Location: The research will be conducted at LITIS Laboratory (Rouen, France) in Normandy. The LITIS (EA 4108) is affiliated to Normandy University, University of Rouen Normandie and INSA Rouen Normandie.
Start date : January/ February 2018
Duration: 20 months
Salary: about 2280 euros/month net salary.

Application
Required skills:
- PhD in Applied Mathematics or computer science,
- Experience in C++, Python or Matlab programming,
- Knowledge in kernel methods, graph based approach constitutes an advantage.

Contact: postdoc-graphkernel@litislab.fr

Required documents:
- up to date CV,
- Any recommendation letter
- A short document on research experience and interests

Job offers : Masters thesis/internship, La Rochelle, France

Funded masters thesis/internship
« *Applications of Scene Text Detection/Recognition for the Visually Impaired and/or Tourist Guidance* »

The following funded masters thesis/internship is available at the L3i La Rochelle; under the supervision of a young and dynamic team. Please forward the information to masters students of your university ;-)

Internship Topic
Applications of Scene Text Detection/Recognition for the Visually Impaired and/or Tourist Guidance

Executive Summary of the Proposed Topic
Text appears everywhere in our natural surrounding environments such as in traffic signs, license plates, advertisement billboards, business cards, building signs, labels on posted parcels and on name plates. People who suffer from visual impairment face challenges reading the text in all those situations, whether reading such text is a necessity for their everyday life or simply for navigating and/or enjoying the world around them. We propose to develop an app for mobile and/or wearable devices to assist the visually impaired by narrating the text in their surrounding natural scenes.

This internship would produce a complete working pipeline of a mobile scene text accessibility system for the visually impaired. The main modules of this pipeline of a smartphone app are: video capture, preprocessing and frame selection, text detection, text recognition (OCR), text-to-speech and/or augmented reality. The app will be tested on Android smartphones and smart-glasses.

Key Words
Scene text detection, scene text recognition, OCR, text accessibility for the visually impaired, Android, wearable devices, mobile-captured images

For more details please refer to the attached document and/or the website of L3i La Rochelle:
http://l3i.univ-larochelle.fr/Emplois-Stages

Contact : Muhammad Muzzamil Luqman (muhammad_muzzamil.luqman@univ-lr.fr)

Call for papers

Event/Location/Web	Event Date	Deadline (paper submission)
ICPRAI 2018, Montréal, Canada Int. Conf. on Pattern Recognition and Artificial Intelligence http://users.encs.concordia.ca/~icprai18/	May 14-17, 2018	-- passed --
CVPR 2018, Salt Lake City, USA Computer vision and pattern recognition http://cvpr2018.thecvf.com/	June 18-22, 2018	--passed--
DAS 2018, Vienna, Austria Int. Workshop on Document Analysis Systems https://das2018.caa.tuwien.ac.at/en/	April 24-27, 2018	January 19, 2018 (short papers / demo)
ICPR 2018, Beijing, China Int. Conf. on Pattern Recognition http://www.icpr2018.org/	August 20-24, 2018	January 19, 2018 (extended)
ICFHR 2018, Niagara Falls, USA Int. Conf. on Frontiers in Handwriting Recognition http://icfhr2018.org/	August 5-8, 2018	March 9, 2018
ECCV 2018 Munich, Germany European Conference on Computer Vision https://eccv2018.org/	September 8-14, 2018	March 14, 2018
BMVC 2018, Newcastle upon Tyne, UK British Machine Vision Conference http://bmvc2018.org/	September 3-6, 2018	April 30, 2018

Summer Schools

Event/Location/Web	Event Date	Deadline (registration)
VISUM 2018, Porto, Portugal Summer school on Vision Understanding and Machine intelligence http://visum.inesctec.pt/	July 5-13, 2018	February 23, 2018
ICVSS 2018, Sicily, Italy International Computer Vision Summer School http://iplab.dmi.unict.it/icvss2018/	July 8-14, 2018	March 31, 2018

Call for datasets

We would like to remind you that the TC10 and TC11 Web sites always welcome contributions of new datasets or other resources related to the community. We would like to encourage all the TC10 and TC11 members to submit such material to the TC10 and TC11 for archiving. The availability of datasets, ground truth and performance evaluation tools online is not only good practice, but also a requirement for a field to progress.

We would like make a special request to the organizers of recent and future competitions. Independently of whether you have the competition datasets and evaluation tools available through other Web sites, please consider archiving them with TC10 / TC11 as well. Web sites often go off-line and useful resources are frequently lost forever.

Please check the TC10 site on information about how to submit datasets for archiving.
http://iapr-tc10.univ-lr.fr/index.php/datasets-and-software

Marcus Liwicki and Syed Saqib Bukhari
TC-11 and TC-10 Dataset Curators