

### International Association for Pattern Recognition

# Technical Committee 10 Graphics Recognition

Activity report for the period: June 2010 – June 2012

http://www.iapr-tc10.org/

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#### 1. TC-10 AIMS AND SCOPE

Graphics recognition is a particular topic in the field of computer vision, and more specifically in the domain of document analysis, devoted to the analysis of any kind of graphical information. Along with optical character recognition (OCR) and document layout analysis, graphics recognition forms the broader area of document image analysis and recognition. Examples of graphic documents are maps, plans, tables, diagrams and drawings, graphical symbols, pen-based user interfaces, etc. The relevance of research in graphics recognition comes from both scientific contribution and application development.

From the scientific point of view, graphics recognition has significantly contributed to research in computer vision and pattern recognition methods. Many different tasks are involved in the analysis of graphical information, covering all steps of image analysis systems: from low-level techniques, such as binarization, noise removal or vectorization, to pattern recognition methods for symbol recognition and knowledge-based systems for semantic interpretation.

From the application point of view, graphics recognition can be applied to a wide range of problems: raster-to-vector conversion of the huge amount of existing plans and maps, 3D-reconstruction, semantic drawing interpretation, information retrieval and navigation in large sets of graphic documents or development of more friendly user interfaces through input of graphic information with pen-based systems, content based retrieval on mobile devices, ....

IAPR's Technical Committee 10 on Graphics Recognition promotes interaction among researchers working in document image analysis in general, and *graphics recognition* in particular. Topics of primary interest to members of this Technical Committee are:

- Raster-to-vector techniques.
- · Recognition of graphical primitives.
- Recognition of graphic symbols in charts, diagrams, and drawings.
- Interpretation of engineering drawings, maps, charts, tables, diagrams, and other graphical documents.
- 3-D models from multiple 2-D views (line drawing).
- Performance evaluation in graphics recognition.
- Historical Graphic document analysis
- Systems for graphics recognition.
- Graphics-based information retrieval and browsing.
- Authoring, editing, storing and presentation systems for graphics multimedia and web-based documents.
- Graphics-based user interfaces.
- · Camera based graphics recognition and indexing

The former TC10 chairs were: R. Kasturi (USA), K. Tombre (France), A. Chhabra (USA), Y.B. Kwon (Korea), J. Llados (Spain), and Liu Wenyin (China). Continuing with the work of these chairs, in the current chairmanship the goal is to continue in the direction of promoting activities and the exchange of new ideas and knowledge among active researchers in the field of graphics recognition and other related fields as well.

#### 2. TC-10 STRUCTURE AND ORGANIZATION

#### 2.1. Chairmanship

At ICPR'2010 in Istanbul, Turkey, the following chairmanship was defined for the next term (until ICPR'2012 in Tsukuba, Japan) and then approved later by the First VP of IAPR:

2.1.1. TC10 chair: Pr. Jean-Marc Ogier, City University of La Rochelle, France.

#### 2.1.2. TC10 vice-chair: Dr. Rafael Lins, Federal University de Pernambuco, Brasil.

We had some discussions among some active and senior members on the reform of the leadership of TC10. As a result, we structured the leadership team around a group of persons the role of which is precisely defined. Our leadership team is composed as follows:

#### 2.1.3. TC10 Dataset curator: Dr. Bart Lamiroy (LORIA, University de Lorraine – France).

The Data Curator function is a new part of the TC-10 executive committee and started operating in full in the beginning of 2011. The TC10 Committee is committed to offering resources to the research community that foster quality experimental research. Typical resources are datasets with annotations (ground-truth), source code, etc. These resources are fundamental for valid peer review and experimental validation through full reproduction of the experimental conditions reported in published works.

These services significantly overlap with actions conducted by closely related other technical committees. The TC-10 committee has therefore paired up with the TC-11 to work towards a common handling of the above mentioned resources. Furthermore, the TC-10 has started evaluating, promoting and using a comprehensive platform hosted at Lehigh University (<a href="http://dae.cse.lehigh.edu">http://dae.cse.lehigh.edu</a>) that allows storage of large amounts of data, associate multi levels of ground truth, and registration of software. This infractructure has been experimentally used for the TC-10 sponsored contests at GREC. Further information is also available at a dedicated area on the TC-10 website: <a href="http://iapr-tc10.univ-lr.fr/index.php/datasets-and-software">http://iapr-tc10.univ-lr.fr/index.php/datasets-and-software</a>.

Dr. Bart Lamiroy (University de Lorraine, Nancy, France)- Dataset curator, responsible for managing the datasets on the website, including tracking down new datasets, investigating distribution issues, and providing additional annotation as needed.

#### 2.1.4. Information Officer and TC 10 Webmaster Dr. Jean-Christophe Burie, University of la Rochelle, FRANCE

Dr Burie is responsible for the content of the TC-10 website, including helping to investigate new functionality to support the research community (http://www.iapr-tc10.org/).

The aim of the TC10 website is to become the main communication tool of the graphic recognition community and to preserve strong interactions between TC members. To reach the goal set, the website has been recently restructured. It is now based on the Content Management System Joomla!.

Information content can be created and managed easily by the webmaster and the TC10 committee. One of the objectives of the TC10 team, through the website, is also to make available different resources (thesis, slides, notes, datasets...) to help new students and researchers in graphic recognition in order to encourage collective scientific progress.

All visitors can browse the information on this website but registered members can also submit and share information including news, activities, conferences, and resources.

Communication efforts will be done in the graphic recognition community to encourage researchers to publish and share contents. The mission of the website is to become the resource center for the whole graphic recognition community.

## 2.1.5. Newsletter editor Dr Alicia Fornes, Computer Vision Center, University Autonomous of Barcelona, Spain, and Dr. Jaehwa PArk, Chung-Ang University, Seoul, Korea,

Dr Alicia Fornes, and Dr Jaehwa Park are Newsletter editors, responsible for working with the TC Chair to produce the monthly TC-10 newsletter, including soliciting information of interest to the community. This aspect is strongly correlated to Webmaster's one.

#### 2.2. Membership and Mailing list

Currently, we have about 300 members worldwide in the distribution list of TC10, who are monthly informed by email about graphics recognition activities and news. These information are sent through the newsletter of the TC10, which is totally integrated to the Website. All the information which are sent to the member list are also available on the website

#### 2.3. Website

The TC10 website is hosted on a server of the La Rochelle University. It can be reached from the following addresses: **www.iapr-tc10.org** and **iapr-tc10.univ-lr.fr**.

The aim of the TC10 website is to become the main communication tool of the graphic recognition community and to preserve strong interactions between TC members.

The configuration of the previous website didn't permit to reach the goal set. Thus, a new website has been recently launched. It is always based on the Content Management System Joomla!. This website has been designed by trying to restitute the high level of interaction that exists between GREC member (especially at the moment of GREC workshop), by

using a collaborative environment which permits TC 10 members to interact through all the possibilities of the website, which is based on Joomla! Technology.

All visitors can browse the information on this website. The home page gives a quick overview of the current *calls for paper* and a list of the next conferences or workshops (see *figure 1*). Registered members can now really submit and share information including news, activities, conferences, and resources.

During the last GREC workshop, discussions between researchers and PhD students have shown that a tool like a forum could be useful to share information, or for PhD students, to ask advices to the community to resolve some problems. So, a forum has been included in the new website (see *figure* 2).

Till now, the newsletter was sent to a mailing list that we try to keep update from several years. We have noted that many e-mail addresses weren't valid anymore. Moreover it was impossible to new people to subscribe to the newsletter. Now, the registration process on the website allows to new members to subscribe to the newsletter automatically. The newsletter will now be sent from the website since a newsletter management system has been inserted in the back office of the CMS. In the last newsletter sent in October, the first one sent from the website (see figure 3), we have invited people (from the mailing list) who wasn't register yet to subscribe to the newsletter to be able to receive it.

Today, three days later, the number of registered people was 80. The number of members should increase in the future.

We try to encourage members to submit on the website resources such as datasets, software or educational materials (lectures, presentation, video) to share them with the community. Among the available resources, one can find, on the website, the videos of the GREC Workshop 2009 held in La Rochelle (see figure 4). The whole workshop has been recorded and is now hosted on iTunesU (see figure 5). The video can be reached from the website or directly from the iTunesU.

The Google analytics measurement tools have also been included in the TC website. The new website is online since October 24th, 2012, so we have no statistics yet. But, in a near future, we will be able to have some information about the number and the origin of the visitors, the frequentation rate, and so on.

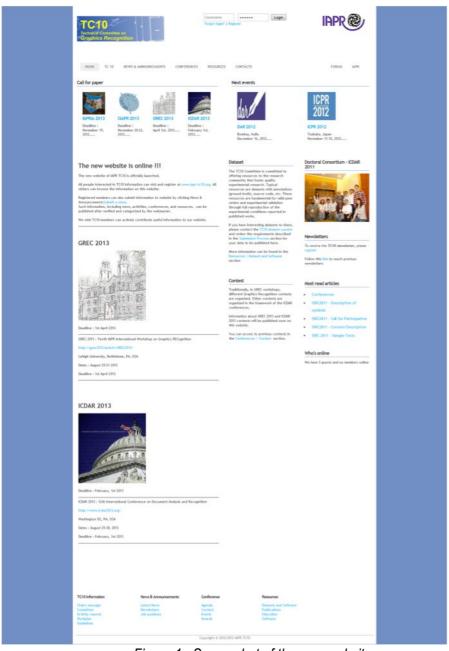


Figure 1 : Screenshot of the new website.

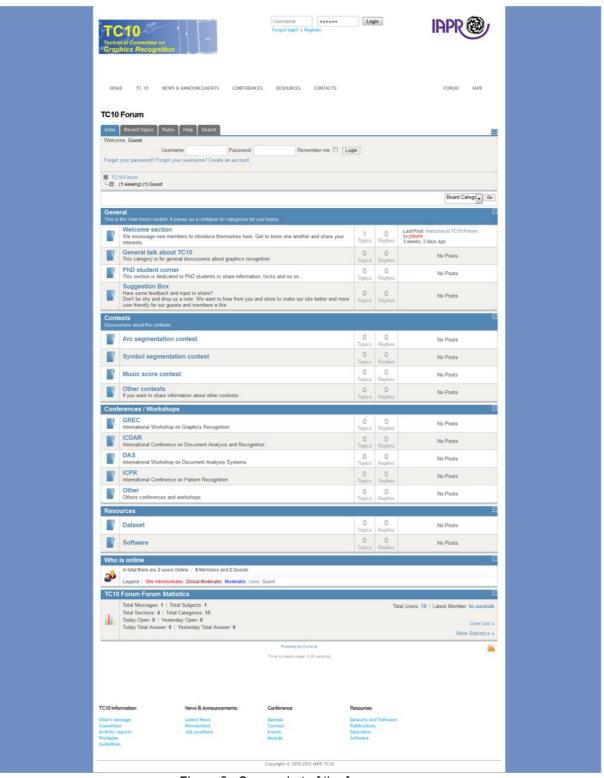


Figure 2 : Screenshot of the forum page.

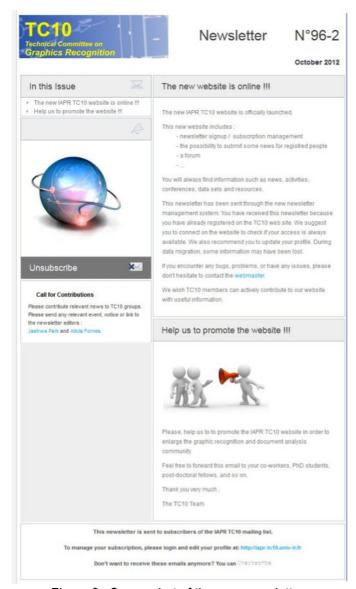


Figure 3: Screenshot of the new newsletter.



Figure 4: Screenshot of the video section.

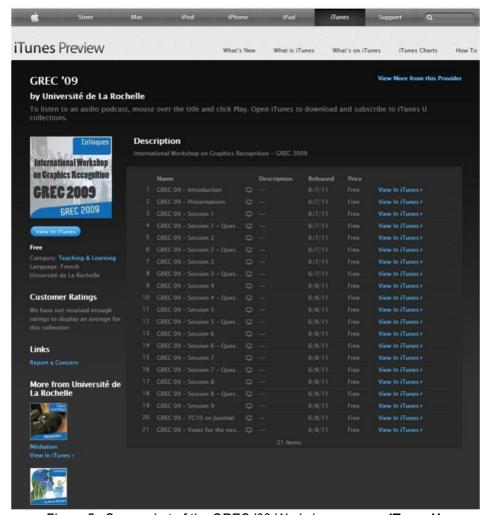


Figure 5: Screenshot of the GREC '09 Workshop page on **iTunesU**.

After the renovation of the old website in 2009, another new website of IAPR TC10 has been officially launched in 2012 and the domain name of <a href="https://www.iapr-tc10.org">www.iapr-tc10.org</a> has been migrated to the server hosted at the University de La Rochelle and managed by Jean-Marc Ogier's team, under the responsibility of Jean-Christophe Burie, who plays the role of Webmaster. All people interested in TC10 information can visit and register at <a href="www.iapr-tc10.org">www.iapr-tc10.org</a>. All visitors can browse the information on this website. Registered members can also submit information to the website. Such information, including news, activities, conferences, and resources, can be published after verified and categorized by the webmaster.

Among the contents of the website, let's mention the possibility to upload some educational materials, or any kind of information which is interesting to be shared between TC 10 members. Let's also mention the presence of GREC Podcasts which are available from the website and from ItUnes U.

An example of GREC 2009 Podcast can be found at the following address:

https://itunes.apple.com/fr/itunes-u/grec-09/id445366593

#### 3. EVENTS

TC-10 collaborates and promotes the organization of two main events. First, The Graphics Recognition (GREC) Workshop series, every two years, is the main activity of the Graphics Recognition community. Second, The International Conference on Document Analysis and Recognition (ICDAR), is the main activity of the whole document analysis community, organized jointly by TC-10 and TC-11 every two years. Both events have been held in September 2009 and September 2011 successfully. TC-10 has focused its main activities of the 2010-2011 year in organizing and supervising the organization of these two events for the 2011 session.

#### 3.1. 9th International Workshop on Graphics Recognition (GREC2011)

This is the main activity of TC10. GREC 2011 was held at Chung-Ang University Korea, September 15-16, 2011, just before ICDAR2011.

Workshop chairs: General Chair:

Young Bin Kwon Chung-Ang University, Seoul, Korea Kwon Young Bin <ybkwon@cau.ac.kr>

**Program Chair:** 

Jean-Marc Ogier
Department of Computer Science, City University of La Rochelle
email: jean-marc.ogier@univ-lr.fr

Workshop home page: <u>grec2011.cau.ac.kr/</u>

This is one of the main activity of TC10. GREC'2011 was held at Chung-Ang University, Korea , September 15-16, 2011, just before ICDAR2011 (Beijing, China). The number of extended abstracts accepted for presentation was 37 after the reviewing process. We had 49 participants coming from 20 different countries.

Workshop photos, and paper PDFs are available on the web  $\underline{\text{http://grec2011.cau.ac.kr}}$ 

Some pictures of the event are presented below



Following the tradition of the previous workshops in the series, the scientific program was organized in a single-track 2-day workshop. It comprised 7 sessions dedicated to specific topics.

Session topics included:

- Map and Ancient Documents;
- Symbol and Logo Recognition
- Indexing and Retrieval of Data
- Sketch and Drawings
- Feature Extraction
- Challenge Processing
- Performance Evaluation

We aimed to respect the traditional GREC model, a true workshop with interaction rather than a miniconference. From this point GREC 2012 was a big success, since the discussions were numerous and interesting for the community. As said earlier selected and extended papers of GREC2011 will be shortly published in Vol. 7423 of the Springer LNCS series in 2012.

#### 3.2. International Graphics Recognition Contests

Contests are useful not only to evaluate the state-of-the-art on algorithms related to different problems of graphics recognition, but also to provide evaluation databases to the community. In GREC'2011, the three following contests were held. The winners of these contests obtained formal prices during GREC 2011, and the results were presented again during ICDAR 2011, held in Beijing.

Continuing with the tradition of past GREC workshops, the program of GREC2012 included graphics recognition contests.

In particular, three contests were organized,

- Arc segmentation contest, organized Hasan S.M. Al-Khaffaf and Abdullah Zawawi Talib (USM, Malaysia),

Contest chair: Abdullah Zawawi Talib

Mohd. Azam Osman Hasan S.M. Al-Khaffaf Universiti Sains Malaysia

E-mail: hasan@cs.usm.my

Contest home page: http://www.cs.usm.my/arcseg2011/

The Arc Segmentation Contest 2011 was the sixth in the series of contests and to be held during GREC'11 in Chung-Ang University, Seoul, September 15-16, 2011. It will be organized by School of Computer Sciences, Universiti Sains Malaysia (USM), Penang, Malaysia. The previous contest was held during GREC'09, La Rochelle, France, July 22-23, 2009 and was also organized by USM. As with previous contests, segmentation for only arcs and circles were tested.

Symbol recognition contest, organized by Philippe Dosch (LORIA, France), Ernest Valveny (CVC Spain), and Mathieu Delalandre (University of Tours, France).

Contest chairs: Ernest Valveny

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Vandoeuvre-lès-Nancy, France

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Contest home page: <a href="http://iapr-tc10.univ-lr.fr/index.php/symbol-contest-2011">http://iapr-tc10.univ-lr.fr/index.php/symbol-contest-2011</a>

Following the experience of the previous contest, <u>Third Contest on Symbol Recognition</u> at <u>GREC'09</u>, a new edition of the contest was held during the <u>9<sup>th</sup> IAPR workshop on graphics recognition (GREC'2011)</u> in Seoul, September 2011. The main goal was compare various methods for recognizing linear graphic symbols, i.e. symbols made of lines, arcs and simple geometric primitives, which can be found in any kind of graphic drawings.

 Music Scores: Writer Identification and Staff Removal, organized by Alicia Fornes (CVC Barcelona Spain), Anjan Dutta (CVC Barcelona Spain), Albert Gordo (CVC Barcelona Spain), and Josep Llados (CVC Barcelona Spain).

Contest chairs: Alicia Fornés

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Contest home page: <a href="http://dag.cvc.uab.es/cvcmuscima/competition">http://dag.cvc.uab.es/cvcmuscima/competition</a>

For the first time, considering a new challenge identified by GREC community, a new contest was held during GREC'2011, on musical scores analysis. Indeed, in the last years, there has been a growing interest in the analysis of handwritten music scores. In this context, the focus of interest of this contest is two-fold: the recognition of handwritten music scores (Optical Music Recognition), and the identification (or verification) of the authorship of an anonymous music score.

#### 3.3. 11th International Conference on Document Analysis and Recognition (ICDAR'2011)

ICDAR'2011 was held in Beijing (China), September 18 – September 21, 2011

Conference chairs:

Honorary Chair RuWei Dai (CASIA, China)

#### **General Chairs**

Xiaoqing Ding (Tsinghua Univ., China) Hiromichi Fujisawa (Hitachi Ltd., Japan) Jianying Hu (IBM, USA)

#### **Program Chairs**

Chew Lim Tan (NUS, Singapore)
Daniel Lopresti (Lehigh Univ., USA)
Thomas Breuel (Univ. Kaiserslauten, Germany)

#### **ICDAR Advisory Board**

Jean-Marc Ogier (Univ. La Rochelle, France) TC10 Chair Daniel Lopresti (Lehigh Univ., USA) TC 11 Chair Simone Marinai (Univ. Florence, Italy) Andreas Dengel (DFKI, Germany) Apostolos Antonacopoulos (Univ. Salford, UK)

Conference home page: http://www.ICDAR2011.org

There were 422 paper submissions, of which 277 were accepted. Of the accepted papers, 90 were scheduled for oral presentations and 187 for poster sessions. Finally, there were 373 registered participants participated in ICDAR2011. The final program spent 3 days and was made up of:

- 3 keynotes speech.
- 18 oral sessions in 3 parallel tracks.
- 3 poster sessions.
- A panel session
- A plenary competition session was also arranged before the closing session to allow 18 competitions' organizers to present their reports.

The following satellite events were held before the conference:

GREC 2011	Nineth IAPR International Workshop on Graphics Recognition (GREC 2011)
	Chung-Ang University, Seoul, Korea
	Chaires : YB Kwon, JM Ogier
	15-16 September, 2011
J- MOCR- AND	Joint Workshop on Multilingual OCR and Analytics for Noisy Unstructured Text Data (J-MOCR-AND)
	Chairs: Santanu Chaudhury, Venu Govindaraju, Daniel Lopresti, Prem Natarajan
2011	Chairs: Lipika Dey, Daniel Lopresti, Christoph Ringlstetter, Shourya Roy Beijing Friendship Hotel, 17 September 2011
	7 0
HIP 2011	International Workshop on Historical Document Imaging and Processing (HIP)
	Chairs: William A. Barrett, Michael S. Brown
	Beijing Friendship Hotel, 16-17 September 2011
AFHA 2011	First International Workshop on Automated Forensic Handwriting Analysis (AFHA 2011)
	Chairs: Marcus Liwicki, Michael Blumenstein, Elisa van den Heuvel, Bryan Found
	Beijing Friendship Hotel, 17-18 September 2011 15-16 September, 2011
CBDAR	Fourth International Workshop on Camera-Based Document Analysis and Recognition (CBDAR 2011)

2011	Chairs: Masakazu Iwamura, Faisal Shafait
2011	Beijing Friendship Hotel, 22 September 2011

During ICDAR2011, the general Chair (Pr David Doermann *University of Maryland, USA*) of ICDAR'2013 (to be held in Washington, DC, US, August 25-28, 2013) also reported his preparation.

The ICDAR Advisory Board also examined and presented two bids for the ICDAR'2015 organization. A ballot was organized during a joint TC10/TC11 meeting, in order to choose between the two proposals. It was approved that ICDAR'2015 be held in Tunis, Tunisia, September, 2015, and will be managed by Prof. Adel Alimi.

#### 4. OTHER ACTIVITIES

#### 4.1. ICDAR Steering Committee (Advisory Board)

The TC10 chair is a member of the ICDAR steering committee (Advisory Board). Such committee was installed in 2001 in order to (a) keep track of the organisational process of current and forthcoming ICDAR conferences, and (b) to maintain the organisational and 'cultural' coherence in this conference series. The members of the current edition of the ICDAR steering committee are:

Jean-Marc Ogier (Chair, TC10)
Daniel Lopresti (Chair, TC11)
Simone Marinai (Chair, IAPR C&M Committee)
Andreas Dengel (Past ICDAR Organizer)
Apostolos Antonacopoulos (Past ICDAR Organizer)

The committee received two proposals for ICDAR2015 from Prof. Adel Alimi (ENIS, Tunisia), and from Prof Simone Marinai (Firenze, Italia) which were analyzed by the ICDAR steering committee. The final choice was

#### 4.2. IAPR/ICDAR Awards

An ICDAR Award Program has been established to recognize individuals who have made outstanding contributions to the field of Document Analysis and Recognition in one or more of the following areas:

- Research
- Training of students
- Research/Industry interaction
- Service to the profession

Every two years, two awards categories are presented, namely, the Young Investigator Award (no more than 40 years old in the calendar year when ICDAR is held) and the Outstanding Achievements Award. Each award consists of a token gift and a suitably inscribed certificate. The organization of the ICDAR Award Program was done by IAPR TC-10 and TC-11. A call for nominations was distributed among ICDAR, TC10 and TC11 mailing lists and also the ICDAR and IAPR web pages. The final decision was made this year by the Awards Committee that consists of the following people:

#### Chair of the committee : Jean-Marc Ogier (TC10 Chair )

David Doermann (IJDAR EIC)

Horst bunke (Previous winner of Outstanding Achievements Award)

Hiromichi Fujisawa (winner of Outstanding Achievements Award in 2005)

Koichi Kise (TC11 representative)

Josep Llados (previous ICDAR chair/ winner of Young Investigator Award in 2007)

Dan Lopresti (TC11 Chair)

Liu Wenyin (previous TC10 Chair)

Umapada Pal

Katrin Franke (previous winner of Young Investigator Award in 2009)

This year, the committee had received two nomination for the Outstanding Achievements Award and three nominations for the Young Investigator Award. Finally, the committee decided to award Prof. Sargur Srihari

(University of Buffalo, State University of New York, USA) the Outstanding Achievements Award for his outstanding and continued contributions to research and education in handwriting recognition and document analysis, and services to the community and Dr Masakazu Iwamura (Osaka Prefecture University, Japan) the Young Investigator Award for his

outstanding contributions to handwriting analysis and computational forensics. The awards ceremony was held during ICDAR2011 in Beijing (China).

#### 4.3. ICDAR Doctoral Consortium

For the first time, a doctoral consortium was organized last year just before ICDAR 2011.

For current Ph.D. students, this Doctoral Consortium proved to be a very valuable experience. It provided an opportunity for Phd sturdents to talk about thier dissertation research and receive guidance from senior researchers working in the field. It also gave them the chance to interact with fellow graduate students from other institutions to learn about the work they are doing. Finally, they made contacts that proved to be helpful when they will start their job search.

For advisors of Ph.D. students, the Doctoral Consortium provided an excellent opportunity for their students to publicize the work students are doing with them. It could also lead to new collaborations for you and their students.

The Doctoral Consortium was scheduled for the afternoon of September 18, which was the day before ICDAR starts. There was no cost to participate, but interested students must submit an application via the ICDAR website. All details concerning the Doctoral Consortium can be found on the homepage:

http://www.icdar2011.org/EN/column/column39.shtml

Participation was limited to no more than 25 students -- those who were interested were advised to submit their applications online.

The doctoral consortium committe was composed of the following members.

ICDAR 2011 Doctoral Consortium Organizing Committee

- TC-11 Chair: Prof. Daniel P. Lopresti (Lehigh University, USA)
- TC-10 Chair: Prof. Jean-Marc Ogier (Université de La Rochelle, France)
- Prof. Jean-Christophe Burie (Université de La Rochelle, France)
- Prof. Masakazu Iwamura (Osaka Prefecture University, Japan)
- Prof. Gernot A. Fink (TU Dortmund University, Germany)
- Dr. Dimosthenis Karatzas (Universitat Autónoma de Barcelona, Spain)
- Prof. Koichi Kise (Osaka Prefecture University, Japan)
- Prof. Bart Lamiroy (Nancy Université, France)
- Prof. Rafael Lins (Universidade Federal de Pernambuco, Brazil)
- Prof. Josep Lladós (Universitat Autònoma de Barcelona, Spain)

#### 5. 2012-2014 WORKPLAN AND BEYOND

#### 5.1. Conference, workshop

The main objectives for the next year are still the classical activities: GREC workshop, ICDAR conference, ICDAR doctorial consortium, and ICDAR Awards.

Especially, GREC'2013 will be organized and chaired by Dr Bart Lamiroy (LORIA, University of Lorraine, France).
 GREC 2013 will be held in Lehigh University, Bethlehem, PA, USA - August 20-21 2013. We have already obtained IAPR sponsorship for this workshop.

The website of next GREC 2013 is: http://grec2013.loria.fr/GREC2013/node/16

#### Important dates:

Paper submission: end of March, beginning of April 2013

Acceptance notification: mid May 2013

Camera ready: June 2013

In correlation with GREC workshop, and related to the different contests which will be organized. Our first contacts let us think that several contests should be organized again :

- symbol recognition / spotting
- Arc segmentation contest
- Logo detection / recognition
- musical scores recognition

Ground-truth database construction will continue, as well as the preparation of DAE plat-form, the aim of which is to serve as a recurrent performance evaluation environment. All these points are coordinated by Bart Lamiroy. For this session of GREC 2013, we will try to organize a session dedicated to industrial companies in order to develop links with companies. A panel discussion will be organized, in order to create research connection between TC10 researchers and companies. Furthermore, the management team of TC10 is currently trying to open the research community to other communities which may be interested by graphic recognition contributions. Some contacts have already been taken with the organizers of sketch recognition workshop (http://srl.csdl.tamu.edu/workshops/2011/iui/index.html).

- The ICDAR'2013 conference will be held at the <u>Washington DC Omni Shoreham</u> hotel with the main conference sessions being held August 25-28, 2013, workshops on the 23rd and 24th and half-day tutorials on the 24th and 25th.
- The second session of the doctoral consortium will be held on the afternoon of the 25th.

#### Important dates:

Paper Submission:Feb 1, 2013 Acceptance Notification:May 1, 2013 Camera Ready Papers Due:Jun 1, 2013 Advanced Registration:Jun 1, 2013

#### 5.2. <u>Doctoral consortium</u>

TC10 is one of the major actor of the doctoral consortium, in partnership with TC 11, with which many links are currently being created (see part 4.3). The second session of the doctoral consortium will be held on the afternoon of the August 25th, 2013, during ICDAR 2013 conference.

#### 5.3. LNCS post-GREC2013 volume

Traditionally, after the GREC workshop, a selection of best papers is published in a volume of Lecture Notes in Computer Science (Springer). The book corresponding to GREC'2013 should be published in May, 2014. We have already negociated with springer for this publication, and we obtained their agreement.

#### 5.4. Website evolution

Even if this point has considerably changed thanks to Joomla! Platform, we will improve the TC10 website, add more contents and promote the forum/QA section as a dynamic way to exchange ideas among TC-10 community.

The idea is globally to emphasize the number of contents which can be useful for young Phd students. We introduced some Podcasts of GREC 2009 sessions which have a very high level of consultation. All these information can be found on TC 10 website. This idea of Podcast is going to be generalized for the coming GREC workshops.

#### 5.5. TC10- TC11 connections

Considering the points that could be intelligently shared between these two communities (both TC 10 and 11), the leading teams are working together in order to give a high visibility to their respective activities, and try to pool all the points that contribute to the progress of the whole document analysis community (datasets and performance evaluation, for instance)

#### 6. RECOMMENDATION TO EXCO FOR TC LEADERSHIP TEAM FOR 2012-2014

#### 6.1. Leadership team

For the 2012-2014, we would like to recommend almost the same team as for the last period.

- 6.1.1. TC10 chair: Pr. Jean-Marc Ogier, City University of La Rochelle, France.
- 6.1.2. TC10 vice-chair: Pr. Rafael Lins, Federal University de Pernambuco, Brasil.
- 6.1.3. TC10 Dataset curator: Dr. Bart Lamiroy, LORIA, University de Lorraine, Nancy France.
- 6.1.4. Information Officer and TC 10 Webmaster Dr. Jean-Christophe Burie, University of la Rochelle, FRANCE
- 6.1.5. Newsletter editor Dr Alicia Fornes, Computer Vision Center, University Autonomous of Barcelona, Spain,