

# The 27<sup>th</sup> Annual ACM Symposium on Applied Computing Riva del Garda (Trento), Italy



March 25-29, 2012

## Call-for-papers on **Document Engineering**

For the past twenty-seven years, the ACM Symposium on Applied Computing has been a primary gathering forum for applied computer scientists, computer engineers, software engineers, and application developers from around the world. SAC 2012 is sponsored by the ACM Special Interest Group on Applied Computing (SIGAPP), and is hosted by The Microsoft Research - University of Trento Centre for Computational and Systems Biology, Trento, Italy

Updated information may be found at:

http://www.acm.org/conferences/sac/sac2012/

Document Engineering is a branch of computer science that investigates systems for documents in any form and in all media. Document engineering is concerned with principles, tools and processes that improve our ability to create, manage, store, compact, access and maintain documents. The fields of document recognition and retrieval have grown rapidly in recent years. This development has been fueled by the emergence of new application areas such as the World Wide Web (WWW), digital libraries, and video- and camerabased OCR. The use of OCR is spreading from high-volume, niche domains to more general tasks, including the processing of noisy "real-world" documents, photocopies, and faxes.

These are the main areas of concern in Document Engineering:

- Algorithms and systems for machine-printed and handwritten character and word recognition, especially for degraded documents;
- Character and word segmentation techniques;
- Identification and analysis of tables or equations;
- Page segmentation, including hierarchical decomposition of documents into text regions,

- colored/textured background, halftones, lineart, etc;
- Logical structure analysis, linguistic representation of structure and syntaxdirected recognition of logical structure;
- Raster-to-vector conversion of line-art, maps, and technical drawings;
- Filtering and enhancement techniques for document images;
- Document image compression;
- Document degradation models;
- Video and camera based OCR:
- Applications of document recognition to the WWW and digital libraries;
- Techniques to support spoken language access to document text (audio browsing of document databases);
- Multilingual character recognition;
- Other topics relating to document analysis and character recognition;
- Impact of recognition accuracy on retrieval effectiveness;
- Recovery and use of logical structure for retrieval:
- Relevance feedback techniques for document retrieval;
- Cross-language and multi-lingual retrieval;
- Categorization and summarization of text documents and imaged documents;
- Keyword spotting in document images;
- Approximate string matching algorithms for OCR text;
- Non-textual retrieval methods;
- Image and multimedia search;
- Interfaces for retrieval;
- · Benchmarking and evaluation issues;
- Other topics relating to the retrieval of documents and document images.

### **Paper Submission**

Authors are invited to submit original and unpublished papers in all areas of document engineering.

The program committee will blindly review submissions to that track. The author(s) name(s)

and address(es) must not appear in the body of the paper, and self-reference should be in the third person. This is to facilitate blind review. The paper should not exceed 5 pages in ACM format. Submissions should be printable on a standard printer on common paper formats, such as US letter and A4. Papers should not be submitted to more than one ACM-SAC track.

Paper submissions should be done electronically through the START website:

https://www.softconf.com/c/sac2012/.

Accepted papers will be published in the annual conference proceedings. Authors are allowed up to 8 pages. For papers with more than 5 pages in the final camera ready, there will be a charge per extra page. One may refer to the final copy format at

http://www.acm.org/sigs/pubs/proceed/template.html.

Papers presented will be selected for publication in a special issue of an international journal. The last four issues of the DE-Track were published in the Journal of Universal Computer Science by Springer.

#### **Important Dates:**

August 31, 2011: Paper submissions October 12, 2011: Author notification November 02, 2011: Camera-Ready Copy

#### **Program Committee**

- Adel M. Alimi (University of Sfax, Tunisia)
- Alfredo Cuzzocrea (University of Calabria, Italy)
- Andrei Formiga (U.F.PB, Brazil)
- Angelo Marcelli (University of Salerno, Italy)
- Apóstolos Antonacopoulos (Univ. of Salford, UK)
- Alejandro C. Frery (UFAL, Brazil)
- Andreas Dengel (Kaiserslautern Univ., Germany)
- Antony Wiley (Hewlett Packard Labs., Bristol, UK)
- Boris Chidlovskii (Xerox Research Europe, France)
- Brian Lawler (Cal Poly, USA)
- Cinthia Freitas (PUC-Paraná, Brazil)
- Daniel P. Lopresti (Lehigh University, USA)
- David S. Doermann (University of Maryland, USA)
- Elisa Barney Smith (Boise State Univ., USA)
- Ergina Kavallieratou (Univ. of the Aegean, Greece)
- Fábio Gianetti (HP Labs., P.Alto, USA)
- Fernando Pereira (IST Liboa, Portugal)
- Flávio Bortolozzi (CESUMAR, Brazil)
- F.Heron de Carvalho Jr (Univ. Fed. Ceará, Brazil)
- F.Mário Martins (Univ. Minho em Braga, Portugal)
- George Cavalcanti (UFPE, Brazil)
- Graham Leedham (Nanyang Tech.U., Singapore)
- Henry S. Baird (Lehigh University, USA)
- Hirobumi Nishida (Ricoh SW R. Center, Japan)
- J.Caldas Pinto (Inst. Superior Técnico, Portugal)
- Jacques Facon (PUC Paraná, Brazil)
- Jean-Marc Ogier (U. de la Rochelle, France)
- Jin H. Kim (Computer Science Dept., Korea)
- Jian Fan (HP Labs, USA)
- Jian Liang (Media Management Tech, USA);
- João Marques de Carvalho (U.F.CG, Brazil)
- Jonathan J. Hull. (Ricoh California, USA)

- Josep Llados (Uni. Autonoma de Barcelona, Spain)
- Juan Paz Vieira (U. Central de las Villas, Cuba)
- Kazem Taghva (University of Nevada, USA)
- Lawrence O'Gorman (Avaya Labs, USA)
- Liu Wenyin (City Univ. of Hong Kong, China);
- Luis Corte-Real (Univ. do Porto, Portugal)
- Luis Eduardo Oliveira (U.F.PR, Brazil)
- Louisa Lam (The Hong Kong Institute of Education, Hong Kong)
- Majid Mirmehdi (University of Bristol, England)
- Marcelo Thielo (Hewlett-Packard R&D., Brazil)
- Marco Gori (Università di Siena, Italy)
- Marcos Galindo (U.F.PE., Brazil)
- Maria Feldgen (Univ. Buenos Aires, Argentina)
- Mohamed Cheriet (ETS-Montreal, Canada);
- Nasser Sherkat (The Nottingham Trent U., UK)
- Nelson Mascarenhas (Univ. de São Paulo, Brazil)
- Nicole Vincent (Paris 5, France)
- Olac Fuentes (U.Texas at El Paso, USA)
- Pedro Rangel Henriques (Univ. Minho, Portugal)
- Pedro Quelhas (Univ. do Porto, Portugal)
- Pertti Vakkari. (University of Tampere, Finland)
- Qian Lin (Hewlett Packard Labs., P.Alto, USA)
- Rafael Dueire Lins (U.F.PE, Brazil) Chair
- Ricardo Queiroz (*Univ. Brasília, Brazil*)
- Robert Sabourin (ETS, Canada)
- Rolf Ingold (University of Fribourg, Switzerland)
- Salvatore Tabbone (Univ. of Nancy 2, France)
- Sargur Srihari (State U. NY at Buffalo, USA)
- Seiichi Uchida (Kyushu University, Japan)
- Seong-Whan Lee (Korea University, Korea)
- Steven J. Simske (HP Labs., USA)
- Tan Chew Lim (NUS, Singapore)
- Thierry Paquet (Université de Rouen, France)
- Thomas Breuel (TU Kaiserslautern, Germany)
- Thomas Mandl (Univ. of Hildeshein, Germany)
- Tin Kam Ho (Bell Laboratories, USA)
- Tsang Ing Ren (U.F.PE, Brazil)
- Umapada Pal (Indian Statistical Institute, India)
- Utpal Garain (Indian Statistical Inst., India)
- Venu Govindaraju (State U. NY at Buffalo, USA)
- Weiler Finamore (P UC, Rio de Janeiro, Brazil)
- Xiaoqing Ding (Tsinghua University, China)

#### Secretariat and Website:

Gabriel Silva: gfps@cin.ufpe.br

Updated information on the Document Engineering track may be found at:

http://www.telematica.ee.ufpe.br/sac2012/

#### Contact

For further information please contact the track organizer:

Rafael Dueire Lins

Departamento de Eletrônica e Sistemas Universidade Federal de Pernambuco

Recife - PE - BRAZIL

Phone: + 55 81 2126-8210 ext 241

Fax: + 55 81 2126-8215 E-mail: <u>rdl.ufpe@gmail.com</u>