3rd International IEEE Colloquium on Information Science and Technology

CALL FOR PAPERS

INVITED SESSION ON ARABIC NATURAL LANGUAGE PROCESSING: MODELS, SYSTEMS AND APPLICATIONS

Invited session on "Arabic Natural Language Processing:Models, Systems and Applications" will be held on 21-22 October 2014 within IEEE CIST'14, in Tetuan-Chefchaouen, Morocco.

Language technologies are instrumental to millions of people who use them every day without even being aware of them. Systems like Google Translate and web search engines rely more and more on levels of linguistic information automatically provided through NLPbased tools operating in the background. This development, we believe, has deeply affected the way we think about language from a scientific perspective. Linguists have progressively turned the focus of their research from abstract structural properties of language to the dynamics of its usage in every-day communicative contexts. There is increasing awareness that language technologies and computational models of language processes not only shed considerable light on traditional issues in language and literary studies but may also lead to a radical reconceptualization of them. Theoretical models of aspects of language usage such as language acquisition, lexical access, speech recognition, text translation, text analysis, ontology extraction, reading and optical character recognition can be put to a rigorous empirical test through computerbased implementations of some of their assumptions. In this perspective, computer technologies prove to provide an empirical middle ground where interdisciplinary insights coming from different theoretical standpoints and scientific domains can be empirically assessed and possibly integrated.

This special session is intended to explore and debate the contribution of computational language models to a better understanding of linguistic, psycholinguistic, sociolinguistic, historical and literary issues of the Arabic language and culture. We particularly welcome contributions addressing fundamental aspects of Arabic NLP, communication technology, language resources and automated text analysis by looking at their implications for both state-of-the-art language technologies and Arabic language knowledge at large.

Topics

We solicit submission of original ideas and papers describing significant results and developments from both researchers and practitioners in a specific range of fields addressing the following topics:

- Information retrieval and extraction
- Text mining
- Named entity recognition
- · Question answering
- Word sense disambiguation
- Machine Translation
- Stochastic language models
- · Connectionist language models
- Language technologies for Arabic cultural heritage
- · Arabic optical character recognition
- Arabic digital epigraphy

Chairs

Vito Pirrelli, Institute for Computational Linguistics CNR, Pisa Italy

Arsalane Zarghili, FST University of Fez, Morocco

Scientific Committee

Ahmed Aarab, Faculty of Technical Sciences, Tangier Morocco Sami Boudelaa, Department of Linguistics University Al Ain, United Arab Emirates

Federico Boschetti, Institute for Computational Linguistics CNR, Pisa Italy

Houda Bouamor, Carnegie Mellon University, Qatar Violetta Cavalli-Sforza, Al Akhawayn University, Morocco

Ilham Chaker, FST University of Fez, Morocco Yacine El Younoussi, ENSA of Tetuan, Morocco

Nizar Habash, Center for Computational Learning Systems, Columbia University

Nabil Hathout, CNRS Université de Toulouse-Le Mirail, France Karima Lyhyaoui, King Fahd High School of Translation, Tangier Morocco

Azzedine Mazroui, University of Oujda, Morocco Behrang Mohit, Carnegie Mellon University, Qatar Kemal Oflazer, Carnegie Mellon University, Qatar

Vito Pirrelli, Institute for Computational Linguistics CNR, Pisa Italy

Horacio Rodriguez, Universitat Politecnica de Catalunya, Barcelona Spain

Abdelhadi Soudi, Ecole Nationale de l'Industrie Minérale, Rabat Morocco

Youssef Tahir, University Hassan 2 of Casablanca Morocco François Yvon, LIMSI CNRS Université de Paris-Sud, France Arsalane Zarghili, FST University of Fez, Morocco

Organising Committee

Ouafae Nahli, ILC-CNR Pisa, Italy Claudia Marzi, ILC-CNR Pisa, Italy Ismail Jellouli, FST, UAE, Tetuan, Morocco Ahmed Zinedine, FSDM, USMBA, Fez, Morocco Marcello Ferro, ILC-CNR Pisa, Italy Eva Sassolini, ILC-CNR Pisa, Italy Sebastiana Cuccurullo, ILC-CNR Pisa, Italy Angelo Del Grosso, ILC-CNR Pisa, Italy

Papers submissions

Prospective authors are expected to submit an original paper of 4 to 6 pages max (including references) in English, French or Arabic. However, accepted submissions will be required to be in scholarly English for publication in the conference proceedings. Use of the on-line abstract submission form and IEEE manuscript template is also required.

Deadlines

Paper Submission
Acceptance Notification
Camera-ready Submission
Author Registration
Invited session Date

April 15, 2014
May 30, 2014
June 23, 2012
July 23, 2012
October 21,22 2012

At least one of the co-authors of every paper should register.

Contact information

Detailed and up-to-date information about IEEE CIST'14, Fez and Morocco can be accessed through the colloquium's website http://www.ieee.ma/cist14/







