
A Special Session on

Arabic Natural Language Processing: Algorithms, Resources, Tools, Techniques, and Applications

In conjunction with the 19th IEEE International Symposium on Signal Processing and Information Technology (ISSPIT'19)
Ajman, UAE, December 10 - 12, 2019
<http://www.isspit.org/isspit/2019/>

AIMS AND SCOPE:

Arabic language is the largest Semitic language which is still in existence, one of the most widely spoken languages in the world, and one of the six official languages of the United Nations (UN). Many researchers from the Arab world and worldwide have special interests on Arabic Natural Language Processing (NLP). In fact, many research efforts have been conducted addressing various aspects of Arabic NLP worldwide. Several improvements have been achieved for various language processing components (*e.g.* morphological analysis, parsing, named entities recognition, audio transcription, acoustic model, language model, phonetic dictionaries, continuous speech recognition, etc), which involved Classical Arabic, Modern Standard Arabic (MSA), and Colloquial Arabic. We invite submissions for this special session on *Arabic Natural Language Processing: Algorithms, Resources, Tools, Techniques, and Applications*, as part of 19th IEEE International Symposium on Signal Processing and Information Technology (ISSPIT'19), Ajman, UAE. This special session provides a platform to present state-of-the-art research efforts on Arabic NLP including its new directions and emerging trends, tools, applications, evaluation methodologies, ongoing and planned activities. Research efforts pertaining Arabic NLP algorithms, resources, technologies, and applications for processing text, speech and multimodalities are encouraged to be submitted. In addition, papers integrating speech and/or multimodalities with written resources are welcomed. Furthermore, this special session aims to bring together researchers with a generic interest on Arabic NLP to raise awareness of different perspectives and practices, and to identify some common themes. We therefore welcome submissions on a range of topics of interest, including but not limited to:

- Guidelines, standards, best practices and models for Arabic NLP interoperability
- Methodologies and tools for annotating Arabic NLP resources
- Methodologies and tools for the extraction and acquisition of knowledge
- Issues in, and evaluation of, morphological analysers, PoS taggers, and parsers
- Issues in, and evaluation of, machine translation
- Text-mining, stylometry, and authorship attribution
- Corpus query languages and tools
- Dictionaries, thesauri, WordNet, ontologies, and knowledge representation
- Religious text analytics
- Information extraction and summarization
- Arabic social media analysis including hate speech detection, speech acts classification, sentiment analysis, opinion mining, ...etc.
- Arabic speech recognition and understanding
- Arabic acoustic and language models
- Arabic phonetic dictionaries and transcriptions

- Arabic speech synthesis
- Emotion recognition using Arabic speech and/or multimodal biometrics
- Speaker recognition and verification using Arabic speech and/or multimodal biometrics
- Arabic Speech Translation
- Arabic language resources and corpora (spoken, written, etc), and tools
- Arabic speech paralinguistic
- Conversational agents and chatbots.
- Arabic sign language

PAPER SUBMISSION:

The session solicits original, unpublished, and high-quality research papers. The authors are invited to submit their contributions formatted as IEEE double columns. All submitted papers will be refereed by at least two reviewers for quality, correctness, originality, and relevance. All accepted papers will be published in the conference proceeding and will be included in IEEE Xplore digital library. Authors are kindly required to follow the (ISSPIT'19) submission procedure with an email notification to the session organizer (m.abushariah@ju.edu.jo and m.abushariah@gmail.com) including the paper ID and the paper title.

IMPORTANT DATES:

- Deadline for paper submission: October 30, 2019
- Notification of acceptance: November 15, 2019
- Deadline for camera-ready submission: November 18, 2019
- Conference date: December 10-12, 2019

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