Call for Papers
IEEE Signal Processing Society
IEEE Journal of Selected Topics in Signal Processing

Special Issue on Statistical Learning Methods for Speech and Language Processing

In the last few years, significant progress has been made in both research and commercial applications of speech and language processing. Despite the superior empirical results, however, there remain important theoretical issues to be addressed. Theoretical advancement is expected to drive greater system performance improvement, which in turn generates the new need of in-depth studies of emerging novel learning and modeling methodologies. The main goal of this special issue is to fill in the above need, with the main focus on the fundamental issues of new emerging approaches and empirical applications in speech and language processing. Another focus of this special issue is on the unification of learning approaches to speech and language processing problems. Many problems in speech processing and in language processing share a wide range of similarities (despite conspicuous differences), and techniques in speech and language processing fields can be successfully cross-fertilized. It is of great interest to study unifying modeling and learning approaches across these two fields. The goal of this special issue is to bring together a diverse but complementary set of contributions on emerging learning methods for speech processing, language processing, as well as unifying approaches to problems across the speech and language processing fields.

We invite original and unpublished research contributions in all areas relevant to statistical learning, speech processing and natural language processing. The topics of interest include, but are not limited to:

- Discriminative learning methods and applications to speech and language processing
- Unsupervised/semi-supervised learning algorithms for Speech and language processing
- Model adaptation to new/diverse conditions
- Multi-engine approaches for speech and language processing
- Unifying approaches to speech processing and/or language processing
- New modeling technologies for sequential pattern recognition

Prospective authors should visit http://www.signalprocessingso ciety.org/publications/periodicals/jstsp/ for information on paper submission. Manuscripts should be submitted using the Manuscript Central system at http://mc.manuscriptcentral.com/jstsp-ieee. Manuscripts will be peer reviewed according to the standard IEEE process.

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First review completed: Oct. 30, 2009
Revised manuscript due: Dec. 11, 2009
Second review completed: Feb. 19, 2010
Final manuscript due: Mar. 26, 2010

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