



Interspeech 2005 Special Session

Speech recognition in ubiquitous networking and context-aware computing

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Overview:

The past decade has witnessed a growing interest in deploying automatic speech recognition (ASR) in communication networks. The advent of ubiquitous computing and networking has fostered ASR systems of a distributed nature and facilitated ubiquitous ASR. The benefits offered by networked solutions such as distributed speech recognition (DSR) have been widely accepted and exploited in that context. The trends in present development in networks show that personalisation will play a paramount role in the success of future services. As a consequence there is a high demand for research aimed at ASR systems that are personalised and context-aware.

Ubiquitous networking and context-aware computing will have a significant impact on the ASR research, demanding also for a paradigm shift to take place. For example, the deployment of ASR technology in today's real world services is restricted due to factors like environmental noise and speaker-related variations. In context-aware systems, however, some of these problems can potentially be reduced by personalisation and environmental awareness.

Three categories of context are foreseen to be considered: firstly the computing context such as network and terminal capabilities, secondly the user context such as the user's profile and location, and thirdly the physical context such as noise characteristics. Personalisation of ASR systems may be realised by adapting to these contexts.

This special session will bring together both academic and industrial researchers with the aim of discussing and addressing the above issues in developing ASR systems that are distributed, personalised and context-aware. It is the expectation that this will stimulate discussions leading to new paradigms and advances in ASR research.

Call for papers:

We invite submissions of papers on, but not limited to, the following topics:

- Ubiquitous speech recognition
- Personalization of acoustic models
- Personalization of language models
- Personalized/context-aware spoken language systems
- Environmental awareness for speech recognition
- Distributed speech recognition
- Standardization issues

Submissions shall be made using the Interspeech 2005 web server and the review will follow the same procedures as regular sessions. Note that the deadline for special session submissions is the same as for regular sessions. So if you are interested you should refer to the paper submission guidelines given on the conference website (<http://www.interspeech2005.org/>).

We would like to encourage you to send an email to Zheng-Hua Tan (zt@kom.aau.dk) if you intend to submit a paper mentioning the topic(s) you plan to cover. This enables us to keep you informed of any updating information and will facilitate the planning of the session(s). A sufficient number of accepted submissions may allow for a poster session in addition to an oral session.

Important dates:

- Full paper submission deadline: April 8, 2005
- Notification of paper acceptance: June 10, 2005
- Conference dates: September 4-8, 2005

The organisers:

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