



**CS and EE Colloquium Series &
Dallas Chapter of IEEE Signal Processing Society Present**

Selected Topics from Recent Research on Automatic Speech Recognition at Tokyo Tech

**Professor Sadaoki Furui
Tokyo Institute of Technology**

**2pm, Thursday, October 29, 2009
HH 2.402 (Karl Hoblitzelle Hall)**

This talk introduces several topics selected from recent activities on automatic speech recognition (ASR) research in our laboratory. They include: (1) Development of the flexible and high-speed WFST-based "T3" decoder and its application to large-vocabulary continuous speech recognition and ASR for resource-deficient languages, (2) Cross-validation and aggregated adaptation algorithms for reducing over-training problems in unsupervised acoustic model adaptation, (3) Automatically generating abbreviations for Chinese named entities and its application to voice search, and (4) Improving an inference network-based Indonesian spoken query information retrieval system by proper-noun adaptation, English-to-Indonesian phoneme mapping and confidence score-based term weighting.

Sadaoki Furui is currently a Professor at Tokyo Institute of Technology, Department of Computer Science. He is engaged in a wide range of research on speech analysis, speech recognition, speaker recognition, speech synthesis, and multimodal human-computer interaction and has authored or coauthored over 800 published articles. He is a Fellow of the IEEE, the International Speech Communication Association (ISCA), the Institute of Electronics, Information and Communication Engineers of Japan (IEICE), and the Acoustical Society of America. He has served as President of the Acoustical Society of Japan (ASJ) and the ISCA. He has served as a member of the Board of Governors of the IEEE Signal Processing (SP) Society and Editor-in-Chief of both the Transaction of the IEICE and the Journal of Speech Communication. He has received the Yonezawa Prize, the Paper Award and the Achievement Award from the IEICE (1975, 88, 93, 2003, 2008), and the Sato Paper Award from the ASJ (1985, 87). He has received the Senior Award and Society Award from the IEEE SP Society (1989, 2006), the Achievement Award from the Minister of Science and Technology and the Minister of Education, Japan (1989, 2006), the Purple Ribbon Medal from Japanese Emperor (2006), and the ISCA Medal for Scientific Achievement (2009). In 1993 he served as an IEEE SPS Distinguished Lecturer.

**For more information on the Dallas Chapter and directions to UTD, please refer to
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