

Editorial

ANYONE WHO knows me personally knows how much I hate making speeches and writing editorials. This time, however, writing an editorial turned out to be easy, as it includes very good news.

The first news is about rapid electronic posting of manuscripts accepted for publication in this journal. Starting July of this year, all T-SAP manuscripts will be published on *IEEE Xplore* once the page proofs are approved by the authors. Thanks to the efforts of a very dedicated Editorial Board, our peer review statistics have showed significant improvement. In fact, since the start of 2003, the average time from submission to decision has decreased by 50%. These efforts, however, were counterbalanced by other factors: a reduced page budget during the last two years, a growing number of submissions (50% increase in 2004, relative to 2002), and the publication of two special issues per year on timely, specialized topics. This has created a large queue of accepted papers waiting to be published. Several measures have recently been taken in order to cope with this growing queue and mitigate its adverse effects, such as the publication of relief pages (partly as a separate bound issue in September) and, namely, the rapid posting of accepted papers on *IEEE Xplore*. Moving to electronic pre-publication is the natural progression of events in this age and time, and we strongly believe that T-SAP's experience as the first journal of the Society to be allowed to take a step in this direction will make it much more attractive to the speech and audio processing communities.

The second news concerns the IEEE Signal Processing Society Best Paper awards. In 2005, one of the four Best Paper Awards of the Society was presented to Enrico Bocchieri and Brian Kan-Wing Mak, for their paper entitled "Subspace Distribution Clustering Hidden Markov Model," published in the *IEEE TRANSACTIONS ON SPEECH AND AUDIO PROCESSING*, vol. 9, no. 3, pp. 264-275, March 2001. The new HMM structure presented in this paper exploits the fact that the speech feature vector can be broken into subspaces within which the features are more correlated. This model offers a novel way to improve the speed/accuracy trade-off of speech recognition systems (60% faster), and also to reduce system memory (18 times less memory).

The other accomplishment by members of our community that we celebrate this year is the Young Author Best Paper Award, presented to George Tzanetakis (nominee) and Perry Cook, for their paper entitled "Musical Genre Classification of Audio Signals," published in the *IEEE TRANSACTIONS ON SPEECH AND AUDIO PROCESSING*, vol. 10, no. 5, pp. 239-302, July 2002. This paper describes research performed as part of George Tzanetakis' doctoral dissertation, and which culminated more recently in the development of a scalable peer-to-peer system for searching and retrieving music files based on a set of musical "semantics". A wide range of acoustic features are examined and integrated, aiming at extracting characteristics about musical style, including rhythmic content, timbre, pitch content versus noisiness, and energy. Experiments indicate that the system achieves near human-level performance on the task.

Congratulations to Enrico Bocchieri, Brian Kan-Wing Mak, George Tzanetakis, and Perry Cook! Award winning papers such as theirs should help us, years from now, tracing the history and major developments in our field. This message is also an appeal to all our readers to help us identify such papers. The process of nominating deserving papers for awards is open to all, and covers a three-year window. So send us your nominations for the 2006 paper awards (papers appearing 2002-2004).

Last but not least, I am happy to announce that starting January 2006, Prof. Mari Ostendorf will replace me as the new Editor in Chief for the T-SAP. After receiving her Ph.D. from Stanford University in 1985, and a brief stint at BBN Laboratories, Prof. Ostendorf joined Boston University (BU) in 1987. There, she built (from scratch) a speech research group that attained international renown within a few years. She has been a Professor in the Electrical Engineering Department at the University of Washington since 1999. Her research interests are primarily in statistical approaches to characterize the time-varying nature of acoustic and language models for speech recognition and synthesis, and in computational modeling of prosody. I am confident that Prof. Ostendorf's broad area of expertise in audio, speech and language processing, as well as her excellent leadership skills, will help to move the *TRANSACTIONS* to the next level.