

Inaugural Editorial: Embracing New Opportunities for Growth

I am honored to pen the first few words for this issue to mark the start of my three-year term as Editor-in-Chief (EiC) of the IEEE/ACM TRANSACTIONS ON AUDIO, SPEECH, AND LANGUAGE PROCESSING (T-ASLP). First of all, I would like to thank Li Deng, the EiC 2012–2014, and Mari Ostendorf, our Vice-President (VP) of Publications, for passing me an already very strong T-ASLP and a wonderful team of Associate Editors.

T-ASLP has come a long way since its debut in 1993, when it spun out from the IEEE TRANSACTIONS ON ACOUSTICS, SPEECH, AND SIGNAL PROCESSING. Ever since, it has become part of the professional lives of many. As a reader, author, reviewer, and Associate Editor, I have benefited from all the different ways of connecting with the journal. In particular, the past year has been remarkable for me working as a Senior Area Editor. I am grateful to be part of the team that is witnessing the transformation of the journal, as Deng described it in his inaugural editorial [1], which was evidenced by a jump of impact factor of from the previous 1.6 to the current 2.6.

As the flagship journal of our community, T-ASLP has captured every important moment of the scientific progress in audio, speech, and language technologies. It witnessed the significant baby steps in speech recognition [2] and synthesis, the leaps and bounds of hidden Markov models, and the latest breakthroughs embracing big data and deep learning [3], [4]. It documented the history of the development of perceptual-based speech and audio compression, which laid the foundation of two of the important products and services of our modern society: digital voice communication and portable music players [5]. In 2013, I was fortunate to be involved in the revision of EDICS for the merger of ACM Transactions on Speech and Language Processing (T-SLP) and IEEE T-ASLP [6]. This merger marked an important milestone for T-ASLP, which I believe is a tremendous opportunity for the journal to forge a closer interaction among the audio processing (AP), speech processing (SP) and the natural language processing (NLP) communities. As the only IEEE journal that devotes its EDICS to NLP, the journal is poised to become the main forum for scientific contributions from the NLP community. During the next three years, it will be one of my top priorities to enable and nurture the mechanisms and collaborations required for this to happen.

In his Farewell Editorial: “Keeping Up the Momentum of Innovations” [7], Deng has highlighted recent successes of T-ASLP and expectations of more innovations in the coming years. The journal publishes original work covering audio, speech, and language processing and the sciences that support

them. We are confident that the journal will continue to be the premier scientific journal that reports the latest knowledge discoveries in such areas of research. However, we have not forgotten that the IEEE is an institute of engineers. Indeed, a large proportion of our authors and readers come from the industry; and it is precisely within the industrial arena where many of the technological innovations actually occur. Engineers conduct applied research to make technology more accessible and usable; they make it faster, better, and cheaper. The journal is a forum for reporting these novel contributions in technological innovation. In recent years, audio, speech, and language technologies have witnessed a tremendous growth as key enablers for innovations in mobile and internet services. This reminds us the importance of bridging the gap between scientific knowledge discovery and technological innovation. Our journal will strive to be the preferred publisher of the pioneering work with great industrial-scale successes.

Moving further into the global scene, the Asia Pacific region has become a key growth engine for the world economy. Currently, Asia Pacific also embraces the largest R&D investment in the world. We have observed a substantial increase in authorship from Region 10. As the IEEE Signal Processing Society extends its outreach to Asia, the journal will ride on the new waves of opportunity resulting from this initiative. More specifically, we will leverage the outreach platform that the IEEE Signal Processing Society has established to expand our authorship and readership community in the Asia Pacific region. A journal can only be as good as the authors and the people who make it happen. There is a significant amount of good research work being created in Region 10, but publication in the journal remains a challenge because of the language barrier and the limited skills on scientific writing. By partnering with international conferences such as ChinaSIP and Asia Pacific Signal and Information Processing Association (APSIPA) Annual Summit and Conference, we will provide mentorship programs for young researchers to learn more about scientific writing and publishing in T-ASLP. These initiatives will serve the objective of encouraging a new generation of researchers in the Asia Pacific to contribute more actively to the journal.

Finally, continuing with the T-ASLP’s tradition as the flagship journal of our community, I will maintain the focus of the journal on the main growth areas of audio, speech, and language technologies, while making an effort to expand our authorship. I will also look forward to continuing synergies across related scientific disciplines through joint special issues with other scientific societies. T-ASLP will remain as the central ground for technical discussion and scientific sharing for our areas. Moreover, with the recent merger between ACM T-SLP and IEEE T-ASLP, a much more fertile soil for interaction and sharing between the speech processing and the natural language pro-

cessing communities has been provided, which certainly should bear fruit in the years to come.

I wish to close this inaugural editorial by inviting you to submit your latest research discoveries and technology innovations and by thanking you as readers, authors, reviewers, and editors. Together we will bring our journal to new heights.

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Haizhou Li (M'91–SM'01–F'14) received the B.Sc., M.Sc., and Ph.D. degrees in electrical and electronic engineering from South China University of Technology, Guangzhou, China, in 1984, 1987, and 1990, respectively. Dr. Li is currently the Principal Scientist, Department Head of Human Language Technology in the Institute for Infocomm Research (I²R), Singapore. He is also an Adjunct Professor at the National University of Singapore. His research interests include automatic speech recognition, speaker and language recognition, and natural language processing.

Prior to joining I²R in 2003, he taught in the University of Hong Kong (1988–1990) and South China University of Technology (1990–1994). He was a Visiting Professor at CRIN in France (1994–1995), a Research Manager at the Apple-ISS Research Centre (1996–1998), a Research Director in Lernout & Hauspie Asia Pacific (1999–2001), and the Vice President in InfoTalk Corp. Ltd. (2001–2003).

Dr. Li is currently the Editor-in-Chief of the IEEE/ACM TRANSACTIONS ON AUDIO, SPEECH, AND LANGUAGE PROCESSING (2015–2017). He has served in the Editorial Board of *Computer Speech and Language* (2012–2014). He is an elected Member of IEEE Speech and Language Processing Technical Committee (2013–2015), the Vice President of the International Speech Communication Association (2013–2014), and the President of Asia Pacific Signal and Information Processing Association (2015–2016). He was the General Chair of ACL 2012 and INTERSPEECH 2014.

Dr. Li is a Fellow of the IEEE. He was a recipient of the National Infocomm Award 2002 and the President's Technology Award 2013 in Singapore. He was named one of the two Nokia Visiting Professors in 2009 by the Nokia Foundation.