ASSTA NEWSLETTER

Michael Tyler

EDITORIAL

Welcome to the July 2006 issue of the ASSTA Newsletter.

In this issue you will find some conference reports from successful ASSTA travel awardees and, most importantly, a Call for Papers for SST-2006. The deadline for submissions has been extended to August 28, so there is still time! Remember that SST's review process is notable in that it accepts full-paper submissions that will become peer-reviewed conference papers. See the website for more details.

Thanks also to those members who sent me submissions for this issue. If you have received an ASSTA travel award, please be sure to send along your conference report. We editors are always happy to hear suggestions about what you would like to see in your newsletter. Is there a burning issue that you would like to bring to the speech science community? Send it along! You can expect a call for submissions for the next issue very soon, so start planning now!

This newsletter has still been designed for publication on the web. Please see the ASSTA homepage for the electronic version. All underlined words are hyperlinks to other pages, email addresses and web pages.

Michael Tyler

CONTENTS

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Send notices on conferences to Lisa Stephenson, and thesis abstracts and book reviews to Johanna Barry.

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ASSTA recognises the support of
The University of Western Sydney
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PRESIDENT'S REPORT

Denis Burnham

This report incorporates number of ASSTA news items, some new some not so new.

First and foremost, ASSTA has now changed its name, though not its acronym. ASSTA is now the Australasian Speech Science and Technology Association, a change which is now incorporated into ASSTA documents and into the logo (see the top of the page!). Discussion of this change has followed increasing ASSTA involvement from a number of New Zealanders and the PANZE workshop on Australian and New Zealand English at SST '04. A welcome consequence of this change is that the next Speech Science and Technology Association conference, SST '06, will be held in Auckland (5th to 8th of December) (see Call for Papers on pages 6 and 7 of this newsletter). Please put these dates in your diary and bookmark the conference website <http://www.assta.org/sst/2006/>.

Still on conferences, the 2nd HCSNet (Human Communication Science Network) ARC Research Network Summerfest will be held at Sydney University from Monday 27th November to Friday 1st December. This five day event will consist of two days (Monday and Tuesday) of Summer Schools, a day (Wednesday) of the popular Speed Papers initiated at the last Summerfest, and two days (Thursday and Friday) incorporating three workshops, including one of specific interest to ASSTA types – 'Human and Machine Speech'. Again, please put these dates in your diary and look for updates on the HCSNet website <http://www.hcsnet.edu.au/>.

Yet still on conferences, you will know that Interspeech 2008 – ICSLP is being sponsored by ASSTA and held in Brisbane from September 22 to 26, 2008. A logo for the conference is looming and the rudimentary website will soon bear this and other conference news. Again, please put these dates in your diary and bookmark the conference website <http://www.interspeech2008.org/>.

Still on websites, the ASSTA website now includes the capacity for members to update their own information, and also to add in information about their labs and research groups. An electronic bulletin will go out about this shortly, so stay tuned.

And yet still on websites, the Forensic Science Committee of ASSTA has plans for a new website. This committee has been reorganised recently and is now being led by Dr Phil Rose. The most recent new member of the committee is Tony Alderman from the Australian Crime Commission.

ASSTA, now spanning 'the ditch' (the Tasman Sea), is the place to be for all your speech science and technology needs…

Denis Burnham

CONFERENCE REPORTS

Brendan Baker
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Interspeech 2005 – Eurospeech was the 9th biennial conference of the International Speech Communication Association (ISCA), held at the Centro Cultural de Belém, in the historical area of Portugal's capital. I was fortunate to receive an ASSTA travel grant to attend this conference to present some of my recent research.

At the opening session, Professor Graeme Clarke, from the Bionic Ear Institute, Melbourne, was presented with the ISCA medal, and gave the keynote speech entitled "The Multiple-Channel Cochlear Implant: Interfacing Electronic Technology to Human Consciousness". It was an inspiring talk, giving the history of the cochlear implant from initial trials carried out in 1978 through to today's miniaturised technology, and showing how the multiple-channel cochlear implant has become the first clinically effective and safe interface between electronic technology and human consciousness. It was wonderful to see a fellow Australian honoured for his contribution to the speech communication research community, and for his part in initiating the research that resulted in the multiple-channel cochlear implant, a device that has helped restore speech perception to tens of thousands of people worldwide.

The welcome reception was held at the magnificent Claustros do Mosteiro dos Jerónimos (Cloisters of the Jerónimos Monastery). This was a great chance to socialise and network with fellow researchers,

as well as sample some of the wonderful food and drink (great Port!) that the region has to offer. It was comforting to hear a few Australian accents and see some familiar faces, and it soon became evident that Australian institutions were well represented.

I presented 3 separate papers at the conference. This was certainly the largest forum to which I have presented my research and, although presenting in the grand auditorium was rather daunting, I enjoyed the opportunity. The feedback and comments I received after my presentations were invaluable and I have already used the knowledge gained from discussions at the conference to guide my future research.

There were 4 sessions dedicated to my main area of research, "Speaker characterisation and recognition". The presentation by Luciana Ferrer on class-dependent score combination for speaker recognition, along with Tachi Asami's discussion of boosting techniques were very enlightening. Also, of particular interest to my own research, was Elizabeth Shriberg's plenary talk entitled "Spontaneous Speech: How People Really Talk, and Why Engineers Should Care". Elizabeth gave an insightful description of many of the prosodic and "strange" events that occur within spontaneous speech, with an emphasis on disfluencies, emotion, and turn-taking patterns. She went on to describe how we can attempt to automatically extract or recognise these events, encouraging engineers to take more notice of how spontaneous speech is really structured when developing speech processing utilities.

The large range of topics covered at the conference allowed me to expand my general knowledge of speech communication,

and encouraged me to look beyond my own research area. Attending sessions on language identification and large vocabulary speech recognition also allowed me to relay useful information to other members of laboratory back in Brisbane.

The only problem, as with all conferences this size, is that there was not enough time to see everything! We have a lot to look forward to with ICSLP 2008 in Brisbane. I am grateful to both ASSTA and ISCA for helping to provide the opportunity to attend this highly educational and enjoyable event.

Girija Chetty
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I was supported by a travel grant from ASSTA recently for presenting a paper at the Asian Conference on Computer Vision (ACCV) 2006. The conference was held from 14th-16th January 2006 in Hyderabad India, 7th in a biennial conference series, and was organised by International Institute of Information Technology, India. The conference proceedings were published by Springer in the Lecture Notes in Computer Science (LNCS) series. The conference venue was Hotel Taj Krishna located in picturesque Banjara Hills and was sponsored by Microsoft Research, IBM, Infosys, Satyam, Adobe, Google, Sarnoff innovative technologies, and Tata Consultancy services, and had very interesting plenary talks from Prof. Takeo Kanade, Carnegie Mellon University, Pittsburgh, Prof. Andrew Blake, Microsoft Research, Cambridge, Prof. Andrew Zisserman, Oxford University, and

Prof. Baba Vemuri, University of Florida, on a wide variety of topics related to computer vision and its applications. The conference had a huge international participation with more than 500 participants presenting around 200 double blind reviewed oral and poster papers.

The title of my paper was "Face Voice Authentication based on 3D face models", in which I proposed a stronger person authentication technique for thwarting replay attacks, a highly ill-addressed problem in biometric authentication literature so far. The technique is based on checking liveness with multimodal fusion of voice and 3D face information, and draws upon some of the novel techniques earlier proposed by the speaker recognition community.

I had very useful feedback and suggestions on my research work from other participants, and it was very exciting to see so many vision researchers showing so much interest in the use of voice or speech recognition techniques for solving complex vision and pattern recognition problems.

It was a bit surprising that, in spite of more than 20 years of research in computer vision and speaker recognition techniques, both the groups have been working independently, and there has been little interaction between two research groups. I was fortunate to receive ASSTA travel grant and participate in the conference, to share my thoughts with wider research community for solving the complex pattern recognition problem involving fusion of face and voice information for speaker authentication. The opportunity has also helped me to explore the potential for international collaboration in interdisciplinary areas furthering both speech/speaker recognition research as well as computer vision/face recognition research.

Eleventh Australasian International Conference on Speech Science and Technology

Auckland, New Zealand

6-8 December 2006

Call for Papers

ASSTA and the University of Auckland are pleased to announce the Eleventh International Conference on Speech Science and Technology (SST2006). The conference will be held at the University of Auckland's City Campus.

Conference themes

Submissions are invited for oral and poster presentations. Submissions should describe original contributions to spoken language, speech science and/or technology that will be of interest to an audience including scientists, engineers, linguists, psychologists, speech and language therapists, audiologists and other professionals.

Submissions are invited in all areas of speech science and technology, but particularly in the following areas:

- Speech production
- Acoustic phonetics
- Acoustics of accent change
- Music and speech processing
- Emotional speech, voice, intonation and prosody
- Applications of speech science and technology
- Speech Processing for Forensic Applications
- Speech recognition and understanding
- Speaker recognition and classification
- Speech enhancement and noise cancellation
- Pedagogical technologies for speech and singing
- Corpus management and speech tools
- Contributions of speech science and technology to audiology & speech language therapy

SST2004 at Macquarie University featured a successful session on the Phonetics and Phonology of Australian and New Zealand English (PANZE). The organising committee of SST2006 would like to include a further PANZE session during the conference. In addition to a call for papers relating to the above themes, we are therefore also inviting papers on the Phonetics and Phonology of Australian and New Zealand English. We would particularly be interested in papers that deal with the origins and development of these varieties, though not to the exclusion of papers on other topics relevant to PANZE.

Conference Keynote Speakers

Pat Keating
- Professor of Linguistics, University of California at Los Angeles

Joseph Perkell
- Senior Research Scientist, Speech Communication Group, Research Laboratory of Electronics at MIT

Michael Corballis
- Professor of Psychology, University of Auckland

Important dates in 2006

- Submission closing date – Monday 28th August
- Acceptance notice date – Monday 25th September
- Manuscript closing date – Monday 6th November
- Early registration date for conference and pre-conference workshop – Sunday 29th October
- Presenter/Author registration Deadline – Sunday 29th October
- Pre-conference tutorials and workshops – Tuesday 5th December

This conference continues the series formerly known as the Australian International Conference on Speech Science and Technology, as reflected in the numbering. The change in name to Australasian reflects the expansion and similar renaming of ASSTA to include New Zealand-based as well as Australia-based researchers and companies. It is therefore fitting that this first Australasian conference is being held in New Zealand. See http://www.assta.org/sst/2004/ for information on the previous 2004 conference.

For more information about the 2006 conference and paper submission process, please see the ASSTA web site at: http://www.assta.org/. Information will also be posted on the University of Auckland Speech Science web site at: http://www.psych.auckland.ac.nz/Psych/slt/SLTevents.htm

I look forward to welcoming you to the Conference in 2006.

Catherine Watson
Conference Chair, SST 2006

CONFERENCE LOG

Please inform Lisa Yen (nee Stephenson) (`lisa@maccs.mq.edu.au`) about conferences of interest for inclusion in this section.

19-20 August 2006
New Zealand Language and Society conference
Christchurch, New Zealand
http://www.ling.canterbury.ac.nz/LAS2006/

7 - 9 September 2006
TIE Conference on the Typology of Tone and Intonation
Berlin, Germany
http://www.zas.gwz-berlin.de/events/tie/

17 - 22 September 2006
Interspeech 2006 - ICSLP
Pittsburgh, Pennsylvania, USA
http://www.interspeech2006.org/

27 November - 1 December
2nd HCSNet Summerfest
Sydney University, Australia
http://www.hcsnet.edu.au/

28 November - 2 December 2006
152nd Meeting of the

Acoustical Society of America
Honolulu, Hawaii, USA
http://asa.aip.org/honolulu/honolulu.html

6 - 8 December 2006
11th Australasian International Conference on Speech Science and Technology (SST2006),
Auckland, New Zealand
http://www.assta.org/

13-15 December 2006
7th International Seminar on Speech Production (ISSP)
Ubatuba, Sao Paulo, Brazil
http://cefala.org/issp2006/

Forward Notice:
6-10 August 2007
16th International Congress of Phonetic Sciences (ICPhS2007)
Saarland Uni., Saarbrücken, Germany
http://www.icphs2007.de/

SST CONFERENCE PROCEEDINGS

Past SST and ICSLP'98 conference proceedings are available for purchase.

SST-86 to SST-2002 proceedings: $5.50
ICSLP'98 proceedings (on CD): $27.50
SST-2004 proceedings are available on the web
(`http://www.assta.org/sst/2004/`)

Non-members add $11, institutions add $55 to prices for SST proceedings.

Postage and packaging is extra. All prices include GST.

Contact the Publications Manager: `dgrayden@bionicear.org`