EDITORIAL

Welcome to what was supposed to be the second ASSTA Newsletter for 2012, but if we got it out on time we couldn’t mention the fantastic SST that happened in December!

First up is the President’s report, which among other things reports on the never-ending support that ASSTA gives to speech science in Australia. It also mentions that we, the members of ASSTA, voted to allow changes in the fee structure. So, everyone be nice to Shunchi!

The “News” section of newsletter reports on the many successes of ASSTA members - from births to grant success. I can’t wait to have my first...first grant as a lead investigator that is. It is great to share so please send to us any of your good news items.

There is a report on the ASSTA supported workshop on the Phonetic Analysis of Rhythm in Indigenous Languages and a report from Simone Graetzer on Speech Prosody 2012.

ASSTA is supporting for the 15th ACM International Conference on Multimodal Interaction, which for the first time comes to Australia, with student travel grants. Congratulations to Julien and his team on successfully bringing this conference to Australia, and I hope many students take advantage of this opportunity.

On a personal note, I have taken up a permanent position as a Lecturer in Computer Science at Flinders University. So, I’ll be around for a bit longer yet!

Don’t forget, when you have news and information to publicise, this is the place to do it. So keep sending information and updates about your work and upcoming events.

Contents

ASSTA Information................................................................. 2
President’s Report............................................................... 3
News..................................................................................... 5
Research Event Award.......................................................... 7
Research Event ................................................................. 8
Travel Award Report............................................................. 9
Conference Listing............................................................... 10
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Contributions

Contributions should be sent to the newsletter team via email as plain text or as an attachment in Rich Text Format (RTF), Microsoft Word (DOC), or PDF.

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http://www.assta.org/
President’s Report

Conferences
First, I wish to congratulate the co-chairs of SST'12, Felicity Cox and Katherine Demuth, and their Organising Committee, Scientific Committee, and Review Board for what has been, and promises to continue to be, a great SST, one that upholds the quality and relevance of SST and showcases Australasian Speech Science and Technology by both seasoned and new researchers.

With respect to the next SST, I am pleased to announce that SST’14 will be held in Christchurch at the University of Canterbury hosted by Jen Hay and the New Zealand Institute of Language, Brain and Behaviour (NZILBB). We look forward to this!

ASSTA Website
In order to upgrade the ASSTA website further, ASSTA Executive Member Catherine Watson will work on getting an ASSTA directory up and running on the ASSTA website in 2013.

SST Proceedings
Most of the SST conference proceedings are now available on the ASSTA website at http://www.assta.org/?q=sst-conferences.

We are now adding the only two missing sets of proceedings; those that were subsumed under international conferences held in Australasia. These are SST 1998, which consisted of the two poster sessions on the Student Day at ICSLP (International Conference on Spoken Language Processing) 1998 in Sydney, and SST 2008, which consisted of the OzPhon’08 and PANZE’08 sections of Interspeech 2008. We will then have all the pre-digital (1986-1996) and digital sets (1998—) of SST proceedings available on the ASSTA website.

ASSTA Research Grants Schemes
The ASSTA Grant Scheme is designed to foster speech science and technology research in Australasia. The following grants were awarded in 2012:

Travel awards (up to $500 to Student and Early Career ordinary members to support presentation of papers at relevant conferences). Two awards, one for the International Conference on Acoustics, Speech, and Signal Processing (ICASSP) 2012 and one for International Conference on Speech Prosody (ICSP) 2012.

Research Events (for up to $5K for up to 2 awards per annum). Two awards, one to Robert Mailhammer and Jason Shaw for a workshop on speech production and acoustic data analysis of Australian Indigenous languages; and one to Julien Epps for Travel Grants/Discounts for ASSTA members to attend the International Conference on Machine Intelligence (ICMI) 2013.
President’s Report

New Researcher Awards (open to all postgraduate research students or those no more than 2 years beyond their highest degree – $750 towards SST costs plus SST conference dinner funding for up to 6 applicants). No awards this year, as these were supplanted by SST2012’s internal travel prizes/awards.

Special Initiative Awards (up to 2 awards per annum of up to $5K in order to encourage and promote national high-level initiatives in speech science and technology in Australasia by supporting ASSTA members’ applications for nationally competitive research grants). 1 award of $5K to support the application to NeCTAR for a Virtual Lab for Human Communication Science (HCS vLab) (see below).

ASSTA-supported Projects
In 2012 ASSTA again supported ($5K) the ARC Linkage Project, Making demonstrably reliable forensic voice comparison a practical everyday reality in Australia led by Geoff Morrison. The project is progressing well and the projected conclusion date not later than September, 2013.
The ASSTA-supported (a one-off payment of $11K under the old funding rules) Australian Research Council Linkage Infrastructure Equipment and Facilities (ARC LIEF) project, The Big Australian Speech Corpus (Big ASC, see https://austalk.edu.au/), began in 2010 and is now nearing completion. Most of the data have been collected and most have been uploaded. Annotation is progressing, and in particular, various ways of using the read speech data to set up speaker models in order to transcribe the more spontaneous speech data are being investigated.

ASSTA also made a $5K contribution in 2012 to the bid for a Virtual Lab for Human Communication Science (HCS vLab). This was recently funded ($1,332,751) by a NeCTAR (National eResearch Collaboration Tools & Resources) Virtual Laboratory Grant. In 2013 this virtual lab will be set up to house a number of (i) corpora (speech, text, music etc.) and (ii) analysis tools, along with workflow tools to facilitate data storage, access and analysis.

ASSTA Membership Fees
ASSTA membership fees have been constant at (AUD, including GST) $44 for ordinary members, $33 for associate members, $11 for student members, and $165 for corporate members for time immemorial, and in fact these fees were enshrined in the ASSTA constitution. The constitution was changed (as voted on by a quorum of ASSTA members) in 2012 to allow the fees to be changed (with due consultation) by the ASSTA Executive. Such a change may be implemented in 2013 with due consideration to maintaining such expenditure as the ASSTA grants schemes, sponsorship of SST conferences and so forth. If members have views on fees, membership, member services and matters of that ilk, we would be very pleased to hear them.

Denis Burnham,
ASSTA President,
December 5, 2012
Births

Congratulations to Sasha Calhoun (Victoria University, Wellington) and partner Raj on the safe arrival of baby Leela in January of this year!

And congratulations to Brett Baker (Melbourne Uni) and Rikke Bundgaard-Nielsen on the safe arrival of baby Maeve in May of this year!

Future Fellowships

“Understanding bilingual language acquisition in northern Indigenous Australia: phonological, lexical, orthographic, and family factors.”

Caroline Jones (UWS), FT1

Children's language outcomes are critical for health, social inclusion, education and employment. In northern Australia many Indigenous children grow up as Kriol/English bilinguals in disadvantaged communities; this research will establish the linguistic, educational, and family factors in successful language acquisition for these children.

“Understanding the sounds of Australia's Indigenous languages.”

Marija Tabain (La Trobe University), FT2

Our perception of sounds in a non-native language is strongly influenced by our native language background, yet knowledge of minority and endangered language sounds is almost entirely based on the perceptions of European and Asian language speakers. This project will provide the first large-scale acoustic analyses of Australia's Indigenous languages.

Appointments

Congratulations to Associate Professor Paul Warren of Victoria University, Wellington, on being appointed Associate Dean for Postgraduate Research in the Faculty of Humanities and Social Sciences.

Grant Success

Congratulations to various ASSTA members for their recent successful ARC DP grants:

DP130101094 “Affective sensing technology for the detection and monitoring of depression and melancholia”

Goecke, Dr Roland; Parker, Prof Gordon; Christensen, Prof Helen M; Epps, Dr Julien R; Cohn, Prof Jeffrey F; Lucey, Dr Patrick J, 2013-2015

This project will develop reliable and affective sensing technology and evaluate it as an objective measure of depressive disorders; a leading cause of disability worldwide. Outcomes will significantly support and aid clinicians in their diagnosis and treatment, thus providing a major breakthrough with significant research, healthcare and commercial possibilities.

This includes work already underway by Julien's and Roland's groups on recognition of depression from speech.
DP130102624 “Learning to talk whitefella way”

Baker, Dr Brett J; Bundgaard-Nielsen, Dr Rikke L

Many Indigenous children speak Aboriginal English or 'Kriol', which often sounds very different to Standard Australian English. Understanding the differences between these languages, and how 'Kriol' affects the learning of English, will help us to better assist Indigenous children to learn English and likely improve their educational outcomes.

DP130101900 “Discovering the developmental trajectory of lexical stress production”

Arciuli, Dr Joanne; Ballard, A/Prof Kirrie J; Vogel, Dr Adam P

In English words some syllables are more strongly stressed than others. Most children will learn to emphasise these syllables appropriately but some will not. This project will help to understand the normal development of this vital aspect of speech production and allow more effective assistance to those who experience difficulties.

DP130104275 “The social dynamics of language: a study of phonological variation and change in West Australian English”

Docherty, Prof Gerard; Foulkes, Prof Paul

This project studies the role of pronunciation as a marker of individual and community identity. As the first systematic study of accent variability in Perth, it focusses on how, across different contexts, speakers from older and younger generations and different backgrounds deploy speech as a means of projecting social affiliation and difference.

DP130104237 “Children's generalisation and adaptation to unfamiliar regional accents reveal the path of early word learning”

Best, Prof Catherine T; Kitamura, Dr Christine M

This project will use accent variation to probe how normal children, and those with language difficulties (dyslexia and autism), handle the complementary skills of word distinctiveness and word constancy. It will provide important new insights for theories of language development, as well as for early diagnosis and intervention for children with language delays.

DP130102181 “Understanding different speakers vs. different accents: apples and apples or apples and pears?”

Escudero, Dr Paola; ten Cate, Prof Dr Carel J; Aslin, Prof Richard; Schiller, Prof Niels O; Boersma, Prof Dr Paul

This project will examine how human infants, human adults and songbirds learn the variability in the speech signal and will show whether the underlying skills are uniquely human and specific to certain languages. Converging data using innovative technologies will reveal the details of speech comprehension, an important component of human cognition.
DP130103935 “The Indigenous grammar of Aboriginal English: implications for contact linguistics”

Mailhammer, Dr Robert S

This project will investigate how Australian Indigenous languages have shaped Aboriginal English, a major variety of Australian English. The project will significantly advance the knowledge base of linguistics and make a key contribution to improving the social opportunities of Indigenous Australians.

PhD Success

Muawiyath Shujau graduated with his PhD in July of this year from the University of Wollongong, supervised by Dr Christian Ritz. His thesis title was "In Air Acoustic Vector Sensors for Capturing and Processing of Speech Signals".


ASSTA Research Event Award

ASSTA will be supporting the 15th ACM International Conference on Multimodal Interaction (ICMI 2013), Sydney, December 9-13th, 2013 (http://www.acm.org/icmi/2013/), by providing travel grant support for ASSTA student and regular members. This is the first time ICMI has come to the Southern hemisphere and the organisers hope to see lots of ASSTA members at the conference and its associated Workshops and Challenges (on exciting themes not yet publicised!). For more information, please contact Julien Epps j.epps@unsw.edu.au.
This day long workshop was well attended with 25 participants coming from around New Zealand and Australia, including the presenters. There were 9 presentations all up. Professor Amalia Arvaniti, from the University of Kent, was the keynote speaker with a talk entitled “Rhythm and Timing Across Languages”. After that the presentations looked at phonetic analysis of rhythm in the languages of Māori, Samoan, Pitjantjatjara, Urama, Kaytetye, Pukapukan, Finnish, Hungarian, and Turkish. There was a lot of lively discussion and questions. Extended abstracts from all the talks are available from the website:

http://www.assta.org/?q=rhythm-workshop

This site will be a permanent part of the ASSTA research resources. The workshop was well attended by post graduate students, for many of whom this was their first in depth glimpse into the research opportunities of phonetic analysis. They left excited by the possibilities. I would like to thank ASSTA for providing the funding of this event, and strongly encourage others to take advantage of the research event initiative.

**Workshop presenters:** (from the left) Margaret Maclagan, Catherine Watson, Laura Thomson, Amalia Arvaniti, Marija Tabain, Sasha Calhoun, Kevin Salisbury, Myf Turpin, Vica Papp, Jason Brown and Sam Mandal.
Speech Prosody 2012, the sixth international Speech Prosody conference, was held in Shanghai, China, from the 22nd to the 25th of May and was associated with Tongji University, Shanghai. The theme of this year’s conference was ‘Prosody in the Real World: Understanding and Approaching Human Prosodic Performance’, with a focus on the communicative aspects of prosody. The previous conference was held in Chicago, USA, with the theme ‘Every Language, Every Style’. Speech Prosody is the only recurring international conference on prosody in speech. It is the biennial meeting of the Speech Prosody Special Interest Group (SProSIG) of the International Speech Communication Association (ISCA). The aims of the SProSIG are to promote the study and diffusion of knowledge about Speech Prosody. The conference was held at the Grand Central Hotel, near Nanjing Road Pedestrian Street. Nanjing Road is the main shopping street of Shanghai, which leads to the Bund and the People’s Square, by the Huangpu River, the largest river in Shanghai.

This year’s presentations addressed issues such as language acquisition and prosody in second language learners, cross-linguistic studies of prosody, prosody and speech processing and tools, prosody in computational linguistics and the prosody of dialogues and spontaneous speech. Presenters included Yi Xu from University College London, Daniel Hirst of the CNRS and Aix-Marseille University (Hirst was also one of the Co-Chairs), Philippe Martin of Paris Diderot University, Keikichi Hirose of the Department of Information and Communication Engineering of the University of Tokyo, and Mark Hasegawa-Johnson of the University of Illinois at Urbana-Champaign. Also attending were Carlos Gussenhoven of Radboud University, Nijmegen, Vincent Van Heuven of the Leiden University Centre for Linguistics, Sun-Ah Jun of the University of California, Los Angeles, and Klaus Kohler of the Institute of Phonetics and digital Speech Processing (IPdS) at the Christian-Albrechts University of Kiel. Professor Hiroya Fujisaki was also present and contributed to many discussions.

The day before the conference, on Monday 21st May, a tutorial was provided at Tongji University by Yi Xu and Santitham Prom-on on the subject of analysis and synthesis of speech prosody based on articulatory dynamics and communicative functions. The PENTA model and the PENTATrainer2 were introduced. The conference proper commenced on Tuesday 22nd with a lecture on Analysis-by-Synthesis in Prosody Research, delivered by Ruediger Hoffmann of the Technische Universitaet Dresden, and ended on Friday 25th with a lecture at Tongji University delivered by Qiuwu Ma, from the School of Foreign Languages. Participants then shared a banquet at a local restaurant and enjoyed a boat cruise on the Huangpu River. The next meeting is expected to be held in Paris, Dublin or Poznan. The author gratefully acknowledges the financial support of ASSTA and of the School of Languages and Linguistics at the University of Melbourne.
The fifth international workshop on Quality of Multimedia Experience (QoMEX) will bring together leading professionals and scientists interested in evaluating multimedia quality and user experience. QoMEX is the flagship workshop of the European COST action Qualinet, which serves as its technical and financial sponsor. After San Diego (2009), Trondheim (2010), Mechelen (2011), and Yarra Valley (2012), QoMEX 2013 will be held in Klagenfurt am Wörthersee, Austria.

This conference would be of interest to numerous people within the association with an interest in speech quality and perception research, with researchers from multiple disciplines also encouraged to consider submitting papers.

Important Dates (tentative)
- Special session proposals: December 12, 2012
- Submission deadline: February 14, 2013 (full papers); March 13, 2013 (short paper)
- Notification of acceptance: April 17, 2013
- Camera-ready submission: May 15, 2013

SST 2014: 15th Australasian International Conference on Speech Science and Technology
Date: TBA
Submission Deadline: TBA
Location: University of Canterbury, Christchurch
Website: TBA

IEEE ICASSP2013: The 38th International Conference on Acoustics, Speech, and Signal Processing
26 May 2013—30 May 2013
Submission deadline: Closed
Location: Vancouver, Canada
http://www.icassp2013.com/