

NAACL-HLT 2012

**Third Workshop
on
Speech and Language Processing for Assistive Technologies
(SLPAT 2012)**

Workshop Proceedings

June 7–8, 2012
Montréal, Canada

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Introduction

We are pleased to bring you the Proceedings of the Third Workshop on Speech and Language Processing for Assistive Technologies (SLPAT), held in Montreal, Canada on the 7th and 8th of June, 2012. We received 13 paper submissions, of which 8 were chosen for oral presentation and another 2 for demonstration presentation — all 10 papers are included in this volume.

This workshop was intended to bring researchers from all areas of speech and language technology with a common interest in making everyday life more accessible for people with physical, cognitive, sensory, emotional or developmental disabilities. This workshop builds on two previous such workshops (co-located with NAACL HLT 2010 & EMNLP in 2011); it provides an opportunity for individuals from research communities, and the individuals with whom they are working, to share research findings, and to discuss present and future challenges and the potential for collaboration and progress.

While Augmentative and Alternative Communication (AAC) is a particularly apt application area for speech and Natural Language Processing (NLP) technologies, we purposefully made the scope of the workshop broad enough to include assistive technologies (AT) as a whole, even those falling outside of AAC. While we encouraged work that validates methods with human experimental trials, we also accepted work on basic-level innovations and philosophy, inspired by AT/AAC related problems. Thus we have aimed at broad inclusivity, which is also manifest in the diversity of our Program Committee.

We would also like to thank the members of the Program Committee for completing their reviews promptly, and for providing useful feedback for deciding on the program and preparing the final versions of the papers. Thanks also to the NAACL organizers for guidance and support. Finally, thanks to the authors of the papers, for submitting such interesting and diverse work, and to the presenters of demos and commercial exhibitions.

Jan Alexandersson, Peter Ljunglöf, Kathy McCoy, Brian Roark and Annalu Waller

Co-organizers of the workshop

Organizers:

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Brian Roark, Oregon Health & Science University
Annalu Waller, University of Dundee

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Workshop Program

Thursday, June 7th, 2012

Joint Demo and Poster Session, together with the Workshop on Predicting and Improving Text Readability for Target Reader Populations (PITR 2012)

15:30–17:30 Coffee, system demonstrations, and posters

A free and open-source tool that reads movie subtitles aloud

Peter Ljunglöf, Sandra Derbring and Maria Olsson

WinkTalk: a demonstration of a multimodal speech synthesis platform linking facial expressions to expressive synthetic voices

Eva Szekely, Zeeshan Ahmed, Joao P. Cabral and Julie Carson-Berndsen

(plus posters of the regular papers from SLPAT and PITR)

17:30–18:30 SIG-SLPAT business meeting

Friday, June 8th, 2012

08:30–09:00 Registration

09:00–09:10 Opening remarks

Regular Paper Session

09:10–09:35 *Discourse-Based Modeling for AAC*

Margaret Mitchell and Richard Sproat

09:35–10:00 *Applying Prediction Techniques to Phoneme-based AAC Systems*

Ha Trinh, Annalu Waller, Keith Vertanen, Per Ola Kristensson and Vicki L. Hanson

10:00–10:25 *Non-Syntactic Word Prediction for AAC*

Karl Wiegand and Rupal Patel

10:30–11:00 Coffee break

Friday, June 8th, 2012 (continued)

User Panel

11:00–11:50 Invited user panel

Regular Paper Session

11:50–12:15 *Assisting Social Conversation between Persons with Alzheimer’s Disease and their Conversational Partners*

Nancy Green, Curry Guinn and Ronnie Smith

12:15–12:40 *Communication strategies for a computerized caregiver for individuals with Alzheimer’s disease*

Frank Rudzicz, Rozanne Wilson, Alex Mihailidis, Elizabeth Rochon and Carol Leonard

12:40–14:00 Lunch break

Regular Paper Session

14:00–14:25 *Generating Situated Assisting Utterances to Facilitate Tactile-Map Understanding: A Prototype System*

Kris Lohmann, Ole Eichhorn and Timo Baumann

14:25–14:50 *Learning a Vector-Based Model of American Sign Language Inflecting Verbs from Motion-Capture Data*

Pengfei Lu and Matt Huenerfauth

14:50–15:15 *A Hybrid System for Spanish Text Simplification*

Stefan Bott, Horacio Saggion and David Figueroa

Closing

15:15–15:30 Closing remarks

15:30– Coffe break, mingling, brainstorming, and mutual admiration