

NAACL HLT 2019

**The 2019 Workshop on Speech and Language
Processing for Assistive Technologies**

Proceedings of the Eighth Workshop

June 7, 2019
Minneapolis, Minnesota, USA

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Introduction

We are pleased to bring you the Proceedings of the 8th Workshop on Speech and Language Processing for Assistive Technologies (SLPAT), held in Minneapolis, Minnesota, USA, on June 7, 2019. 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 facing physical, cognitive, sensory, emotional or developmental communication challenges. This workshop builds on seven previous such workshops co-located with conferences such as ACL, NAACL, EMNLP and Interspeech. 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 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. Thus we have aimed at broad inclusivity, which is also manifest in the diversity of our program committee.

We thank all the people who made this event possible including both the authors and the members of the program committee.

Heidi Christensen, Kristy Hollingshead, Emily Prud'hommeaux, Frank Rudzicz, and Keith Vertanen
Co-organizers of SLPAT 2019

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Workshop Program

Friday, June 7, 2019

- 9:00–9:30 *Opening Remarks*
- 9:30–10:00 *A user study to compare two conversational assistants designed for people with hearing impairments*
Anja Virkkunen, Juri Lukkarila, Kalle Palomäki and Mikko Kurimo
- 10:00–10:30 *Modeling Acoustic-Prosodic Cues for Word Importance Prediction in Spoken Dialogues*
Sushant Kafle, Cissi Ovesdotter Alm and Matt Huenerfauth
- 10:30–11:00 *Break*
- 11:00–11:30 *Permanent Magnetic Articulograph (PMA) vs Electromagnetic Articulograph (EMA) in Articulation-to-Speech Synthesis for Silent Speech Interface*
Beiming Cao, Nordine Sebkhi, Ted Mau, Omer T Inan and Jun Wang
- 11:30–12:00 *Speech-based Estimation of Bulbar Regression in Amyotrophic Lateral Sclerosis*
Alan Wisler, Kristin Teplansky, Jordan Green, Yana Yunusova, Thomas Campbell, Daragh Heitzman and Jun Wang
- 12:00–14:00 *Lunch*
- 14:00–14:30 *A Blissymbolics Translation System*
Usman Sohail and David Traum
- 14:30–15:00 *Investigating Speech Recognition for Improving Predictive AAC*
Jiban Adhikary, Robbie Watling, Crystal Fletcher, Alex Stanage and Keith Vertanen
- 15:00–15:30 *Break*
- 15:30–16:00 *Noisy Neural Language Modeling for Typing Prediction in BCI Communication*
Rui Dong, David Smith, Shiran Dudy and Steven Bedrick
- 16:00–16:15 *Closing Remarks*

