

Workshop on Speech Production in Automatic Speech Recognition

August 30, 2013
Lyon, France

Call for Papers and Participation

The use of speech production knowledge and data to enhance speech recognition is being actively pursued by a number of widely dispersed research groups using different approaches. The goal of this workshop is to bring together these research groups, as well as other researchers who are interested in learning about or contributing ideas to this area, to share ideas, results, and perspectives in an intimate and productive setting. The range of techniques currently being explored is rapidly growing, and is increasingly benefiting from new ideas in machine learning and availability of data, making this a particularly good time for such a workshop.

The workshop will feature a series of invited talks and general submissions. Submissions focusing on novel research, review papers, and position papers are solicited.

Topics

Topics of interest include speech production models in speech recognition, the collection and use of speech production data, acoustic-to-articulatory inversion, silent speech interfaces, and the use of speech production in related areas such as speech synthesis and voice conversion.

Paper/Abstract Submission

Prospective authors are invited to submit 2-page abstracts or 4-6 page papers written in English. Each paper/abstract will be reviewed by at least two reviewers. Each accepted paper/abstract must have at least one registered author. See the submissions link to the left for further guidelines.

Important Dates

June 17 Papers/abstracts due
July 10 Notification of acceptance
July 20 Deadline for early registration and camera-ready revisions
August 30 Workshop

Invited Speakers

Bruce Denby (U. Pierre et Marie Curie)
Carol Espy-Wilson (U. Maryland)
Shrikanth Narayanan (USC)
Korin Richmond (U. Edinburgh)
Frank Rudzicz (U. Toronto)

Organizing Committee

Scientific Co-Chairs

Karen Livescu	TTI-Chicago
Jeff Bilmes	University of Washington
Eric Fosler-Lussier	Ohio State University
Mark Hasegawa-Johnson	University of Illinois at Urbana-Champaign

Local Organization

Emmanuel Ferragne Université Lyo

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Venue

The workshop will be held at [Institut des Sciences de l'Homme in Lyon, 14 Avenue Berthelot](#).

From the airport: take Airport shuttle to Part-Dieu - then Metro B to Jean Macé - then either walk to 14 Avenue Berthelot (5 min) or take Tram T2 towards Perrache and get off at Centre Berthelot (one station from Jean Macé).

From Gare Part-Dieu (which is where many participants to the main conference have their hotels): same as above, except for the Airport shuttle.

From the Interspeech venue to the Institut des Sciences de l'Homme: bus C1 to Part-Dieu, then, same as above.

At the Institut, please look for signs indicating where the workshop is.

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Local Organization

Emmanuel Ferragne Université Lyon 2

Scientific Program Committee

Miguel Carreira-Perpiñán
Bruce Denby
Li Deng
Carol Espy-Wilson
Prasanta Kumar Ghosh
Louis Goldstein
Simon King
Florian Metze
Vikramjit Mitra
Shri Narayanan
Korin Richmond
Frank Rudzicz
Odette Scharenborg

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Program

09:00-09:45	<i>Invited talk:</i> Shri Narayanan	Measuring and Using Speech Production Information: Some New Opportunities
09:45-10:30	<i>Invited talk:</i> Carol Espy-Wilson	The Invariant Property of Gestures
10:30-10:45	Break	
10:45-11:30	<i>Invited talk:</i> Frank Rudzicz	Completing the Noisy Circuit: Systems of Feedback in Models of Dysarthria
11:30-12:00	<i>Spotlight talks:</i> Schuppler, Ramanarayanan, Magimai-Doss, Juneja, Badino, Li	
12:00-13:45	Lunch break	
13:45-14:30	<i>Invited talk:</i> Korin Richmond	On Measuring and Estimating Speech Articulation
14:30-15:15	<i>Invited talk:</i> Bruce Denby	Down with Sound, the Story of Silent Speech
15:15-15:40	<i>Spotlight talks:</i> Kim, Freitas, Rasilo, Andrew, Fosler-Lussier	
15:40-17:30	Poster session + Carstens info booth	
	B. Carstens and B. Carstens	Carstens Medizinelektronik GmbH information and demonstration booth
	B. Schuppler, J. van Doremalen, O. Scharenborg, B. Cranen, and L. Boves	The challenge of manner classification in conversational speech
	V. Ramanarayanan, M. Van Segbroeck, and S. Narayanan	On the nature of data-driven primitive representations of speech articulation
	M. Magimai-Doss and R. Rasipuram	On using articulatory features in posterior-based ASR system: Representation, estimation, and integration
	A. Juneja and M. Hasegawa-Johnson	Experiments on context awareness and phone error propagation in human and machine speech recognition
	C. Canevari, L. Badino, L. Fadiga, and G. Metta	Cross-corpus and cross-linguistic evaluation of a speaker-dependent HMM-DNN ASR system
	M. Li, A. Lammert, J. Kim, P. Kumar Ghosh, S. Narayanan	Automatic classification of palatal and pharyngeal wall shape categories from speech acoustics and inverted articulatory signals
	Y.-C. Kim, J. Kim, M. Proctor, A. Toutios, K. Nayak, S. Lee, and S. Narayanan	Toward automatic vocal tract area function estimation from accelerated three-dimensional magnetic resonance imaging
	J. Freitas, A. Teixeira, and M. Sales Dias	Multimodal silent speech interface based on visual, depth, surface electromyography, and ultrasonic Doppler
	H. Rasilo, O. Rasanen, and B. de Boer	Virtual infant's online acquisition of vowel categories and their mapping between dissimilar bodies
	G. Andrew, R. Arora, S. Bharadwaj, J. Bilmes, M. Hasegawa-Johnson, and K. Livescu	Using articulatory measurements to learn better acoustic features
	E. Fosler-Lussier, P. Jyothi, J. Keshet, K. Livescu, R. Prabhavalkar, and H. Tang	Discriminative learning with latent articulatory variables