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PRAGUE

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Proceedings of the Workshop on Embodied Language Processing

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Preface

Welcome to the ACL 2007 workshop on Embodied Natural Language. There has been a growing interest within the ACL community in extending the traditional focus on text and speech beyond the confines of natural language towards the inclusion of paralinguistic and non-verbal modes of communication, and beyond the confines of task-oriented language towards the inclusion of social and psychological variables such as attitude and affect. Studies of embodied dialogue systems, emotional expressiveness in speech, and personality detection in text are just a few examples of such research. These new extensions to computational linguistics have found a home in a number of different applications, from analysis of military videos to the development of Ambient Intelligent applications, where natural modes of interaction between humans and machines are envisioned that exploit the full bandwidth of human communication.

These studies in embodied language processing have close connections with other fields of inquiry such as Affective Computing and Embodied Conversational Agents. In all of these fields the many modalities through which we communicate besides language, such as facial expressions, gestures, and posture, play a prominent role. These and other related studies of nonverbal language processing offer complementary insights to traditional work in computational linguistics. After all, human-human communication is inherently multimodal, and unimodal spoken communication is really just an artifact of communications technology, specifically the telephone ... so surely the mechanisms of speech and language processing need to apply not just to word sequences but to natural (multimodal) human language distributed over multiple input streams (speech, hand gesture, gaze ...). It is increasingly clear that integrating the theories, models and algorithms developed in areas such as these with work in mainstream CL, will lead to a richer processing model of natural communication.

Workshop Chairs
Justine Cassell, Northwestern University
Dirk Heylen, University of Twente

Organizers

Chairs:

Justine Cassell, Northwestern University
Dirk Heylen, University of Twente

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Jon Oberlander, University of Edinburgh
Mark Steedman, University of Edinburgh
Matthew Stone, Rutgers University
David Traum, University of Southern California

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Mary Ellen Foster

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Yasuhiro Katagiri

15:25–15:50 *Computing Backchannel Distributions in Multi-Party Conversations*
Dirk Heylen and Rieks op den Akker

15:50–16:15 Break

16:15–16:40 *Which Way to Turn? Guide Orientation in Virtual Way Finding*
Mark Evers, Mariët Theune and Joyce Karreman

16:40–17:05 *A "Person" in the Interface: Effects on User Perceptions of Multibiometrics*
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