

NAACL-HLT 2007

**Bridging the Gap:
Academic and Industrial
Research in Dialog
Technologies**

Proceedings of the Workshop

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Preface

In the recent years, we have seen rapid adoption of dialog systems in commercial applications. They range from telephone-based services, in-car interactive systems, to online conversational service agents and talking characters in computer games. Open-standard platforms such as VoiceXML have been adopted by the industry, and become the driving force for the faster adoption of dialog applications.

The widespread dialog applications in industry setting pose challenge for researchers in both industrial and academic worlds. Progress from academic world has not benefited the real world applications to a satisfactory extent. The purpose of this one-day workshop is to provide a forum to bring industrial and academic researchers together to share their experiences and visions in the dialog technology development, and to identify topics that are of interest to both camps.

There are total 13 papers accepted for presentation at this workshop, with 8 papers for long presentation and 5 for short presentation. These papers are almost evenly divided between the industry and academic communities. In addition, two panels on the related dialog topics have been arranged during the workshop, with distinguished panelists of various backgrounds from academic, industrial, and standardization communities.

We are pleased to see some real convergence from both industry and academic side. While academic researchers are proposing and building practical dialog systems, industrial researchers are starting to implement sophisticated learning and uncertainty modeling into their system. The scope of this workshop papers ranges from advanced dialog systems for technical support, multi-modal methods, to POMDP modeling, reinforcement learning and adaptable dialog architecture.

Finally, we would like to thank our program committee members for their work, and thank the NAACL-HLT conference organizers for their timely support. Together, we hope to foster and advance the state of art of dialog technologies.

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Conference Program

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8:30–8:40	Opening
8:40–9:00	<i>Applying POMDPs to Dialog Systems in the Troubleshooting Domain</i> Jason Williams
9:00–9:20	<i>Training a real-world POMDP-based Dialog System</i> Blaise Thomson, Jost Schatzmann, Karl Weilhammer, Hui Ye and Steve Young
9:20–9:40	<i>The Multimodal Presentation Dashboard</i> Michael Johnston, Patrick Ehlen, David Gibbon and Zhu Liu
9:20–10:00	<i>Technical Support Dialog Systems: Issues, Problems, and Solutions</i> Kate Acomb, Jonathan Bloom, Krishna Dayanidhi, Phillip Hunter, Peter Krogh, Esther Levin and Roberto Pieraccini
10:00–10:30	Break
10:30–10:50	<i>Olympus: an open-source framework for conversational spoken language interface research</i> Dan Bohus, Antoine Raux, Thomas Harris, Maxine Eskenazi and Alexander Rudnicky
10:50–11:10	<i>Toward Evaluation that Leads to Best Practices: Reconciling Dialog Evaluation in Research and Industry</i> Tim Paek
11:10–11:30	<i>Experiments on the France Telecom 3000 Voice Agency corpus: academic research on an industrial spoken dialog system</i> Graldine Damnati, Frdric Bchet and Renato De Mori
11:30–11:50	<i>Experiences of an In-Service Wizard-of-Oz Data Collection for the Deployment of a Call-Routing Application</i> Mats Wirn and Robert Eklund
11:50–1:00	Lunch
1:00–2:30	Panel Discussion Bridging the Gap: Academic and Industrial Research in Dialog Technologies
Panelists	Mazin Gilbert, AT&T Labs - Research Michael McTear, University of Ulster Stanley Peters, Stanford University, CSLI Roberto Pieraccini, SpeechCycle Alex Rudnicky, CMU

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2:30–2:42	<i>AdaRTE: An Extensible and Adaptable Architecture for Dialog Systems</i> Lina Rojas and Toni Giorgino
2:42–2:54	<i>Multi-slot semantics for natural-language call routing systems</i> Johan Boye and Mats Wiren
2:54–3:06	<i>Enhancing commercial grammar-based applications using robust approaches to speech understanding</i> Hebert Matthieu
3:06–3:18	<i>WIRE: A Wearable Spoken Language Understanding System for the Military</i> Helen Hastie, Patrick Craven and Michael Orr
3:18–3:30	<i>Different measurement metrics to evaluate a chatbot system</i> Bayan Abu Shawar and Eric Atwell
3:30–4:00	Break
4:00–6:00	Panel Discussion Spoken Dialog Corpus Composition and Annotation for Research
Organizers	Giuseppe DiFabrizio, Dilek Hakkani-Tür, Oliver Lemon, Mazin Gilbert, Alex Rudnicky