

SDCTD 2012

**NAACL-HLT Workshop on Future directions and needs in
the Spoken Dialog Community: Tools and Data**

Workshop Notes

June 7, 2012
Montréal, Canada

Production and Manufacturing by
Omnipress, Inc.
2600 Anderson Street
Madison, WI 53707
USA

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ISBN13: 978-1-937284-20-6 ISBN10: 1-937284-20-4

Preface

With a large and diverse Spoken Dialog research community that is characterized by its rapid progress and innovation, the SDCTD 2012 workshop is designed to take the pulse of this community, underlining its most advanced discoveries, charting its future directions and tracking its needs. The workshop includes position papers from eminent researchers in the field on a variety of topics that can be grouped under the following five topics:

- Knowledge Acquisition and Resource Creation
- Assessment
- New Technologies for Spoken Dialogue Systems
- Architectures
- Community Building

The spoken dialog research community has interests in specific topics such as belief tracking, multimodal dialog, simulated users, dialog assessment, etc. This diversity of interests makes it difficult to find common threads that can bind the community together. The workshop aims at discovering those common threads. We can cite three types of existing common tools and data. One is data sharing. Another is the Spoken Dialog Challenge, which enables many researchers to compare techniques on a common task. Yet another is the use of a well-documented platform that can be used to teach new researchers about spoken dialog architecture, thus enabling easier entry to our field.

The workshop will have the following structure:

In the morning, speakers will cover the main advances that have been made on each of the five topics in the past five years and then point to specific promising areas of research. We will then have a poster session, reviewing recent projects and tools. In the afternoon, Participants will split into breakout groups on these topics and the groups will report back to all of the participants to attempt to define needs that are common across topics and thus the most widespread in the community. The end of day reports will be available from the workshop website: <http://projects.ict.usc.edu/nld/SDCTD2012/>

Maxine Eskenazi, Alan Black, David Traum, Workshop Chairs

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Workshop Program

Thursday, June 7, 2012

Position Papers

Knowledge Acquisition and resource creation

Up from Limited Dialog Systems!

Giuseppe Riccardi, Philipp Cimiano, Alexandros Potamianos and Christina Unger

Directions for Research on Spoken Dialog Systems, Broadly Defined

Nigel G. Ward

Assessment

Position Paper: Towards Standardized Metrics and Tools for Spoken and Multi-modal Dialog System Evaluation

Sebastian Möller, Klaus-Peter Engelbrecht, Florian Kretzschmar, Stefan Schmidt and Benjamin Weiss

New Techniques for SDS

Dialogue Systems Using Online Learning: Beyond Empirical Methods

Heriberto Cuayáhuitl and Nina Dethlefs

Statistical User Simulation for Spoken Dialogue Systems: What for, Which Data, Which Future?

Olivier Pietquin

The Future of Spoken Dialogue Systems is in their Past: Long-Term Adaptive, Conversational Assistants

David Schlangen

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Architectures

Towards Situated Collaboration

Dan Bohus, Ece Kamar and Eric Horvitz

Incremental Spoken Dialogue Systems: Tools and Data

Helen Hastie, Oliver Lemon and Nina Dethlefs

After Dialog Went Pervasive: Separating Dialog Behavior Modeling and Task Modeling

Amanda Stent

Community-Building

Future Directions in Spoken Dialog Systems: A Community of Possibilities

Alan W Black and Maxine Eskenazi

Bridging Gaps for Spoken Dialog System Frameworks in Instructional Settings

Gina-Anne Levow

A belief tracking challenge task for spoken dialog systems

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Project Notes

Framework for the Development of Spoken Dialogue System based on Collaboratively Constructed Semantic Resources

Masahiro Araki and Daisuke Takegoshi

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HRItk: The Human-Robot Interaction ToolKit Rapid Development of Speech-Centric Interactive Systems in ROS

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