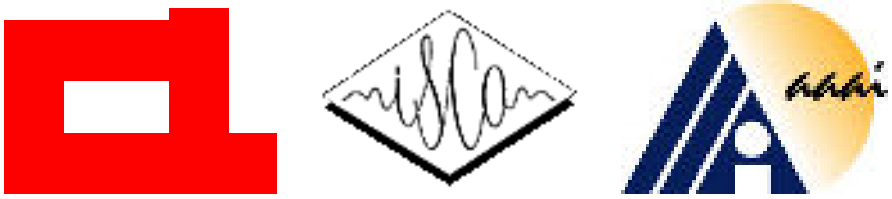
SIGDIAL 2012

13th Annual Meeting of the Special Interest Group on Discourse and Dialogue



Proceedings of the Conference

5-6 July 2012
Seoul National University
Seoul, South Korea

In cooperation with:

Association for Computational Linguistics (ACL)
International Speech Communication Association (ISCA)
Association for the Advancement of Artificial Intelligence (AAAI)

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Introduction

It is our great pleasure to present the Proceedings of the SIGDIAL 2012 Conference, the 13th Annual Meeting of the Special Interest Group on Discourse and Dialogue. The conference is held in Seoul, South Korea, July 5-6, 2012, and is co-located with the 50th Annual Meeting of the Association for Computational Linguistics (ACL).

We received sixty-three submissions: forty long paper submissions, nineteen short paper submissions, and four demo submissions. The members of the Program Committee did a superb job reviewing the submitted papers. We thank them for their advice in selecting the accepted papers and for helping to maintain the high quality of the program. Special thanks go to Giuseppe Di Fabbrizio and Christophe Cerisara for helping out with last minute review requests.

In line with the SIGDIAL tradition, our aim has been to create a balanced program that could accommodate as many favorably rated papers as possible. Of the fifty-nine paper submissions, thirty-eight were accepted: eighteen of forty long paper submissions were accepted as long papers for oral presentation, seven were accepted as long papers for poster presentation, and two were accepted as short papers for poster presentation. In addition, eleven of the nineteen short paper submissions were accepted for poster presentation, for a total of twenty posters. Three of the four demo submissions were accepted.

SIGDIAL continues to serve as a publication venue for research that spans many aspects of discourse and dialogue. This year, the program contained oral presentation sessions and poster papers on discourse structure, paralinguistic features of dialogue, natural language generation and natural language understanding, evaluation, and statistical models of dialogue, as well as on the SIGDIAL 2012 special theme, "characterizing dialog coherence". We particularly thank the two keynote speakers for their contributions to research on coherence and dialogue: Professor Tatsuya Kawahara (Kyoto University) and Professor Diane Litman (University of Pittsburgh).

We thank Kallirroi Georgila, Mentoring Chair for SIGDIAL 2012. The goal of mentoring is to assist authors of papers that contain innovative ideas to improve their quality regarding English language usage or paper organization. This year, nine of the accepted papers were mentored. We thank the Program Committee members who volunteered to serve as mentors: Ron Artstein, Srinivas Bangalore, Michael Johnston, Kristiina Jokinen, Vincent Ng, Andrei Popescu-Belis, David Schlangen, Amanda Stent, and Michael Strube.

We thank Minhwa Chung, Local Arrangements Chair, and Hyung Soon Kim, Jungyun Seo and Sunhee Kim, the members of the Local Arrangements Committee, for taking care of the many details of the local arrangements. We also thank the student volunteers for on-site assistance. We are grateful to ACL PCO Nuricom for designing the conference bags.

We thank Jason Williams, Sponsorships Chair, for recruiting and liaising with our conference sponsors. Sponsorship makes possible valuable aspects of the SIGDIAL program, such as the invited speakers, conference reception and dinner, and best paper awards. We gratefully acknowledge the support of our sponsors, including AT&T, AVIOS, Honda Research Institute, IBM Research, KT Corporation, Microsoft Research, NHN Corporation, and Seoul National University.

We would like to thank last year's Program Co-Chairs, Joyce Chai and Rebecca Passonneau, last year's General Co-Chairs, Johanna Moore and David Traum, and last year's Local Chair, Peter Heeman, for their helpful advice and answers to questions.

We thank Priscilla Rasmussen at the ACL for handling the financial transactions for SIGDIAL 2012, including advance registration.

We gratefully acknowledge SoftConf for use of the START conference management system.

We also thank the SIGDIAL board, in particular Tim Paek, Amanda Stent, and Kristiina Jokinen, for their advice and support.

Finally, we thank all the authors of the papers in this volume, and all the conference participants for making this event such a great opportunity for new research in dialogue and discourse.

Gary Geunbae Lee and Jonathan Ginzburg
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Claire Gardent and Amanda Stent
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SIGDIAL 2012

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Ulle Endriss, University of Amsterdam, The Netherlands
Rivka Levitan, Columbia University, USA
Alejandra Lorenzo, CNRS/LORIA Nancy, France

Invited Speakers:

Tatsuya Kawahara, Kyoto University, Japan
Diane Litman, University of Pittsburgh, USA

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9:15 AM Keynote 1

Multi-modal Sensing and Analysis of Poster Conversations: Toward Smart Posterboard
Tatsuya Kawahara

10:15 AM Coffee Break

10:45 AM Oral Presentation Session 1: Evaluation

10:45 *An End-to-End Evaluation of Two Situated Dialog Systems*
Lina M. Rojas Barahona, Alejandra Lorenzo and Claire Gardent

11:10 *"Love ya, jerkface": Using Sparse Log-Linear Models to Build Positive and Impolite Relationships with Teens*
William Yang Wang, Samantha Finkelstein, Amy Ogan, Alan W. Black and Justine Cassell

11:35 *Enhancing Referential Success by Tracking Hearer Gaze*
Alexander Koller, Konstantina Garoufi, Maria Staudte and Matthew Crocker

12:00 PM Lunch

1:00 PM Oral Presentation Session 2 (Theme Session): Coherence

1:00 *Unsupervised Topic Modeling Approaches to Decision Summarization in Spoken Meetings*
Lu Wang and Claire Cardie

1:25 *An Unsupervised Approach to User Simulation: Toward Self-Improving Dialog Systems*
Sungjin Lee and Maxine Eskenazi

1:50 *Hierarchical Conversation Structure Prediction in Multi-Party Chat*
Elijah Mayfield, David Adamson and Carolyn Penstein Rosé

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2:15 PM Poster Session 1 "Madness"

2:30 PM Poster Session 1

Rapid Development Process of Spoken Dialogue Systems using Collaboratively Constructed Semantic Resources
Masahiro Araki

The Effect of Cognitive Load on a Statistical Dialogue System
Milica Gašić, Pirros Tsiakoulis, Matthew Henderson, Blaise Thomson, Kai Yu, Eli Tzirkel and Steve Young

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2:30 PM Demo Session

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4:00 PM Sponsor Presentations 1

4:25 PM Oral Presentation Session 3: Discourse Structure

4:25 *Towards Mediating Shared Perceptual Basis in Situated Dialogue*
Changsong Liu, Rui Fang and Joyce Chai

4:50 *Global Features for Shallow Discourse Parsing*
Sucheta Ghosh, Giuseppe Riccardi and Richard Johansson

5:15 *A Reranking Model for Discourse Segmentation using Subtree Features*
Ngo Xuan Bach, Nguyen Le Minh and Akira Shimazu

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Friday July 6, 2012

9:00 AM Announcements

9:15 AM Oral Presentation Session 4: Statistical Models of Dialog

9:15 *Landmark-Based Location Belief Tracking in a Spoken Dialog System*
Yi Ma, Antoine Raux, Deepak Ramachandran and Rakesh Gupta

9:40 *Probabilistic Dialogue Models with Prior Domain Knowledge*
Pierre Lison

10:05 *Exploiting Machine-Transcribed Dialog Corpus to Improve Multiple Dialog States Tracking Methods*
Sungjin Lee and Maxine Eskenazi

10:30 AM Coffee Break

11:00 AM Keynote 2

Cohesion, Entrainment and Task Success in Educational Dialog
Diane Litman

12:00 PM Lunch and Business Meeting

1:30 PM Oral Presentation Session 5: Paralinguistic Features

1:30 *A Bottom-Up Exploration of the Dimensions of Dialog State in Spoken Interaction*
Nigel G. Ward and Alejandro Vega

1:55 *Using Group History to Identify Character-Directed Utterances in Multi-Child Interactions*
Hannaneh Hajishirzi, Jill F. Lehman and Jessica K. Hodgins

2:20 *Adapting to Multiple Affective States in Spoken Dialogue*
Kate Forbes-Riley and Diane Litman

Friday July 6, 2012 (continued)

2:45 PM Poster 2 "Madness"

3:00 PM Poster Session 2

Dialog System Using Real-Time Crowdsourcing and Twitter Large-Scale Corpus
Fumihiro Bessho, Tatsuya Harada and Yasuo Kuniyoshi

Automatically Acquiring Fine-Grained Information Status Distinctions in German
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Friday July 6, 2012 (continued)

4:00 PM Sponsor Presentations 2

4:25 PM Oral Presentation Session 6: NLG and NLU

4:25 *Combining Incremental Language Generation and Incremental Speech Synthesis for Adaptive Information Presentation*
Hendrik Buschmeier, Timo Baumann, Benjamin Dosch, Stefan Kopp and David Schlangen

4:50 *Focused Meeting Summarization via Unsupervised Relation Extraction*
Lu Wang and Claire Cardie

5:15 *Markov Logic Networks for Situated Incremental Natural Language Understanding*
Casey Kennington and David Schlangen

5:40 PM Best Paper Awards and Concluding Remarks