SIGDIAL 2011

Proceedings of the SIGDIAL 2011 Conference



The 12th Annual Meeting of the Special Interest Group on Discourse and Dialogue



June 17-18, 2011 Oregon Science & Health University Portland, Oregon, USA 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 2011 Conference, the 12th Annual Meeting of the Special Interest Group on Discourse and Dialogue. The conference is held in Portland, Oregon, June 17-18, 2011, co-located with the ACL conference.

We received 68 paper submissions: 51 as long papers, 17 as short papers. The members of the Program Committee did a superb job in reviewing the submitted papers, providing helpful comments and contributing to discussions when required. We wish to thank all of them for their advice in selecting the accepted papers and for helping to maintain the high quality of the program. Special thanks go to Nicholas Asher, Dan Bohus, Deborah Dahl, Curry Guinn, Staffan Larsson, Andrei Popescu-Belis, and Antoine Raux for helping out with last minute review requests. Many submissions received strong recommendations from the Program Committee. 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 68 submissions, 36 were accepted: 18 of 51 long paper submissions papers were accepted as full papers for plenary presentation, 7 were accepted as long papers for poster presentation, and 5 were accepted as as short papers for poster presentation. In addition, 6 of the 17 short paper submissions were accepted as part of a Special Theme on situated dialogue. In addition, 7 of the 8 demo submissions were presented; the 8th was accepted but withdrawn.

This year, the review process continued the mentoring program that was initiated last year, and was coordinated by Ronnie Smith. The mentoring goal is to assist authors of papers that contain innovative ideas to improve their quality regarding English language usage or paper organization. Compared with the first year, reviewers accepted fewer papers that required mentoring, but we hope the initiative will continue and expand. Our thanks go to Ronnie Smith and the Program Committee members who volunteered to serve as mentors.

We are also grateful to the two keynote speakers whose topics expanded on the special theme of situated dialogue: Professor Alex Lascarides (The University of Edinburgh) and Professor Michael Tanenhaus (University of Rochester).

We would like to thank Peter Heeman, Local chair, and Pat Dickerson and Ethan Selfridge, the members of the local committee for taking care of the many details for the local arrangements. For on-site assistance, we thank the student volunteers, Lin Chen, Joanna Drummond, Joshua Gordon, Elnaz Nouri, Ethan Selfridge and William Wang. For help on the design of the conference bag, we thank Anabel-Franco-Heurta and Jennifer Wohlner.

We would like to thank Jason Williams, Sponsorships chair, for recruiting and liaising with our conference sponsors. The sponsorship program enables valuable aspects of the program, such as the invited speakers, conference reception and dinner, and best paper awards. We would also like to thank our sponsors. General conference sponsors include Microsoft Research, Vlingo, and AVIOS. The banquet is sponsored by Honda Research. AT&T Research sponsored the best paper award, and IBM Research sponsored the best student paper award.

We would like to thank last year's program co-chairs Raquel Fernández and Oliver Lemon for their

advice, and responses to our questions. We thank last year's General co-chair Mikio Nakano for updates to the conference chair kit, and much helpful advice. Thanks also go to Kazunori Komatani and Guodong Zhou for answering our questions related to assembling the conference proceedings.

We would like to thank Priscilla Rasmussen at ACL for handling the financial transactions, including advance registration. We would also like to thank Drago Radev, ACL Secretary, for helpful advice. Thanks to SoftConf for use of the START conference management systems as well as helpful responses on its use. Thanks also to the SIGDIAL board, in particular Tim Paek, Amanda Stent, and Kristiina Jokinen, for their advice and support in all matters.

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.

Johanna D. Moore and David R. Traum General Co-Chairs

Joyce Y. Chai and Rebecca J. Passonneau Technical Program Co-Chairs

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Invited Speakers:

Professor Alex Lascarides, University of Edinburgh Professor Michael Tanenhaus, University of Rochester

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Conference Program

Friday June 17, 2011

9:00 - 9:15 Welcome

9:15 - 10:25 Invited Talk

Strategic Conversation Alex Lascarides

10:25 - 10:45 Coffee Break

10:45 - 12:00 Oral Presentation Session 1

Spoken Dialog Challenge 2010: Comparison of Live and Control Test Results

Alan W Black, Susanne Burger, Alistair Conkie, Helen Hastie, Simon Keizer, Oliver Lemon, Nicolas Merigaud, Gabriel Parent, Gabriel Schubiner, Blaise Thomson, Jason D. Williams, Kai Yu, Steve Young and Maxine Eskenazi

What System Differences Matter? Using L1/L2 Regularization to Compare Dialogue Systems José González-Brenes and Jack Mostow

A Two-Stage Domain Selection Framework for Extensible Multi-Domain Spoken **Dialogue** Systems

Mikio Nakano, Shun Sato, Kazunori Komatani, Kyoko Matsuyama, Kotaro Funakoshi and Hiroshi G. Okuno

12:00 - 12:30 Poster and Demo Madness

Friday June 17, 2011 (continued)

12:30 - 14:30 Lunch

14:30 - 16:00 Poster and Demo Session

16:00 - 16:25 Coffee Break

16:25 - 18:05 Oral Presentation Session 2

A Comparison of Latent Variable Models For Conversation Analysis Sourish Chaudhuri and Bhiksha Raj

Toward Learning and Evaluation of Dialogue Policies with Text Examples David DeVault, Anton Leuski and Kenji Sagae

The Impact of Task-Oriented Feature Sets on HMMs for Dialogue Modeling Kristy Boyer, Eun Young Ha, Robert Phillips and James Lester

Spoken Dialogue System based on Information Extraction using Similarity of Predicate Argument Structures Koichiro Yoshino, Shinsuke Mori and Tatsuya Kawahara

18:30 - 21:30 Conference Reception and Dinner: Sponsored by Honda Research Institute

Saturday June 18, 2011

9:00 - 9:15 Announcement

9:15 - 10:25 Invited Talk

Common Ground and Perspective-taking in Real-time Language Processing Michael K. Tanenhaus

10:25 - 10:50 Coffee Break

10:50 - 12:30 Theme Session: Situated Dialogue

Giving instructions in virtual environments by corpus based selection Luciana Benotti and Alexandre Denis

Optimising Natural Language Generation Decision Making For Situated Dialogue Nina Dethlefs, Heriberto Cuayáhuitl and Jette Viethen

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Multiparty Turn Taking in Situated Dialog: Study, Lessons, and Directions Dan Bohus and Eric Horvitz

12:30 - 14:00 Business meeting and sponsor presentations (boxed lunch included)

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Stability and Accuracy in Incremental Speech Recognition Ethan Selfridge, Iker Arizmendi, Peter Heeman and Jason Williams

Predicting the Micro-Timing of User Input for an Incremental Spoken Dialogue System that Completes a User's Ongoing Turn Timo Baumann and David Schlangen

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"The day after the day after tomorrow?" A machine learning approach to adaptive temporal expression generation: training and evaluation with real users Srinivasan Janarthanam, Helen Hastie, Oliver Lemon and Xingkun Liu

15:55 - 16:20 Coffee Break

16:20 - 17:35 Oral Presentation Session 5

Detecting Levels of Interest from Spoken Dialog with Multistream Prediction Feedback and Similarity Based Hierarchical Fusion Learning William Yang Wang and Julia Hirschberg

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17:35 - 17:50 Best Paper Awards and Closing

Poster Session (Friday, June 17)

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