Proceedings of the 6th SIGdial Workshop on Discourse and Dialogue

Edited by

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Copies of the proceedings are available from Association for Computational Linguistics (ACL) 3 Landmark Center East Stroudsburg, PA 18301 USA Phone: +1-570-476-8006 Fax: +1-570-476-0860 Email: acl@aclweb.org

Preface

We are happy to present the proceedings of the Sixth SIGdial Workshop on Discourse and Dialogue. This workshop continues a series of successful workshops held in Hong Kong, Aalborg, Philadelphia, Sapporo and Boston, and spans the ACL and ISCA SIGdial interest area of discourse and dialogue. The workshop series provides a regular forum for the presentation of research in the discourse and dialogue area to both the larger SIGdial community as well as to researchers outside this community. The workshop is organised by SIGdial, which is sponsored jointly by ACL and ISCA.

We received a total of 80 submissions for this year's workshop which is the highest submission rate to date for the SIGdial workshop series. We have accepted 28 of these papers which is typical for a SIGdial workshop. However, this meant that competition was very hard this year and many good papers had to be rejected. We would like to thank all authors for the effort they spent on their submissions.

Together the accepted papers cover a wide range of topics in discourse and dialogue including discourse and dialogue modelling, dialogue design, error recovery, evaluation of dialogue systems, multimodal dialogue systems, machine learning, statistical approaches in dialogue management, intonation issues, corpora, annotation, and tools.

We are especially grateful for the work of the Program Committee. The many submissions meant that their workload has been considerable. It has been an invaluable help for us to have their input and comments when making the many and often difficult decisions on which papers to accept. The names of the Program Committee members are listed on the next page.

We would also like to express our thanks to several people who otherwise assisted us in organising the workshop. Torben Kruchov Madsen from NISLab took care of all web pages related to the workshop, including submission and review pages. Priscilla Rasmussen from ACL helped with financial matters. Angela Rittinger from the University of Ulm helped us with organsing the review process. Antonio Serralheiro from INESC took care of all local organisation. David Traum from ICT and president of SIGdial assisted with communication to the print house and with various supportive input.

Last but not least we would like to thank our invited speakers Michael McTear from University of Ulster and Roberto Pieraccini from IBM. We are convinced that their contributions will be very valuable to the workshop.

We are happy to announce that a book on recent trends in discourse and dialogue will be published in the Springer Text, Speech, and Language Technology series. The book will be based partly on selected, revised and possibly extended workshop papers and partly on invited contributions. We are looking forward to collaborating with Jolanda Voogd from Springer on this book.

We wish all workshop participants an enjoyable and fruitful event and we hope that all readers of the proceedings will benefit from the contents.

Laila Dybkjær (University of Southern Denmark) and Wolfgang Minker (University of Ulm) Organising Committee

Program Committee

Jan Alexandersson, DFKI, Germany Niels Ole Bernsen, University of Southern Denmark André Berton, DaimlerChrysler AG, Germany Dirk Bühler, University of Ulm, Germany Rolf Carlson, KTH, Sweden Justine Cassell, Northwestern University, USA Mark Core, USC/ICT, USA Morena Danieli, Loquendo, Italy Els den Os, MPI, The Netherlands Hans Dybkjær, Prolog Development Center A/S, Denmark Kate Forbes, University of Pittsburgh, USA Sadaoki Furui, Tokyo Institute of Technology, Japan Joakim Gustafson, Teliasonera, Sweden Gerhard Hanrieder, Temic SDS, Germany Mary Harper, NSF/CISE, USA Koiti Hasida, AIST, Japan Paul Heisterkamp, DaimlerChrysler AG, Germany Ludwig Hitzenberger, University of Regensburg, Germany Masato Ishizaki, University of Tokyo, Japan Kristiina Jokinen, University of Helsinki, Finland Pamela Jordan, University of Pittsburgh, USA Lars Bo Larsen, University of Aalborg, Denmark Susann Luperfoy, Stottler Henke Associates, USA Joseph Mariani, French Ministry of Research and Education Michael McTear, University of Ulster, UK Sharon Oviatt, Oregon Health and Sciences University, USA Tim Paek, Microsoft Research, USA Patrick Paroubek, LIMSI-CNRS, France Roberto Pieraccini, IBM, USA Massimo Poesio, University of Essex, UK Norbert Reithinger, DFKI, Germany Laurent Romary, LORIA, France Alex Rudnicky, Carnegie Mellon University, USA Elizabeth Shriberg, SRI International and ICSI, USA Candy Sidner, Mitsubishi Electric Research Laboratories (MERL), USA Ronnie Smith, East Carolina University, USA Michael Streit, DFKI, Germany Marc Swerts, Tilburg University, The Netherlands Joel Tetrault, University of Pittsburgh, USA David Traum, USC/ICT, USA Bonnie Webber, University of Edinburgh, UK Janyce Wiebe, University of Pittsburgh, USA

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Workshop Program

FRIDAY September 2

- 08.30 09.00 Registration
- 09.00 09.10 Opening

SESSION 1: Outlook

- 09.10 10.10 **Invited speaker: Roberto Pieraccini** Roberto Pieraccini and Juan Huerta *Where do we go from here? Research and Commercial Spoken Dialog Systems*
- 10.10 10.35
 The YRR-SDS Organizing Committee

 A Review of the Young Researchers' Roundtable on Spoken Dialog Systems
- 10.35 11.05 Coffee break

SESSION 2: Intonation; statistical approaches in dialogue management

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11.55 - 12.20	Jason D. Williams, Pascal Poupart and Steve Young Partially Observable Markov Decision Processes with Continuous Observations for Dialogue Management
12.20 - 12.45	Tim Paek and David Maxwell Chickering The Markov Assumption in Spoken Dialogue Management
12.45 - 14.15	Lunch break

SESSION 3: Training data and machine learning

- 14.15 14.40Jost Schatzmann, Kallirroi Georgila and Steve Young
Quantitative Evaluation of User Simulation Techniques for Spoken Dialogue Systems
- 14.40 15.05Grace Chung, Stephanie Seneff and Chao Wang
Automatic Induction of Language Model Data for A Spoken Dialogue System

- 15.05 15.30 Matthias Denecke and Norihito Yasuda Does this Answer your Question? Towards Dialogue Management for Restricted Domain Question Answering Systems
- 15.30 15.55Raquel Fernández, Jonathan Ginzburg and Shalom Lappin
Using Machine Learning for Non-Sentential Utterance Classification
- 15.55 16.25 Tea break

SESSION 4: Corpora, coding schemes and tools

- 16.25 16.50 Kate Forbes-Riley and Diane J. Litman
 Using Bigrams to Identify Relationships Between Student Certainness States and Tutor Responses in a Spoken Dialogue Corpus
- 16.50 17.15 Verena Rieser, Ivana Kruijff-Korbayová and Oliver Lemon A Corpus Collection and Annotation Framework for Learning Multimodal Clarification Strategies
- 17.15 17.40 Natasa Jovanovic, Rieks op den Akker and Anton Nijholt A Corpus for Studying Addressing Behavior in Multi-Party Dialogues
- 17.40 18.05 Alexander Gruenstein, John Niekrasz and Matthew Purver *Meeting Structure Annotation: Data and Tools*
- 18.15 19.15 SIGdial business meeting
- 20.00 Reception

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10.40 - 11.05	Ed Filisko and Stephanie Seneff Developing City Name Acquisition Strategies in Spoken Dialogue Systems Via User Simulation
11.05 - 11.35	Coffee break

SESSION 6: Dialogue evaluation

- 11.35 12.00Liza Hassel and Eli Hagen
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