# INLG'2000

## **Proceedings of the First International Conference on**

## Natural Language Generation

Mitzpe Ramon, Israel

12-16 June 2000



Sponsored by Ben Gurion University of the Negev



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#### Preface

We are pleased to present this volume containing the papers accepted for presentation at the 1<sup>st</sup> International Natural Language Generation Conference, June 12-16, 2000 in Mitzpe Ramon, Israel.

This volume contains 30 papers for the main session, 4 papers to the student session and 5 system demonstration descriptions. The conference will also include two invited talks, and two panel discussions on Evaluation methods in Generation and on the impact of cognitive modeling on generation research.

This conference continues in the tradition of the nine biennial workshops on natural language generation that have been held from 1982 to 1998: INLG'2000 will offer the opportunity to a larger audience to participate in the main meeting of researchers in the field of generation. Following the tradition of previous INLG meetings, the conference will be held in an isolated and stunning natural environment: Mitzpe Ramon, located on the edge of the Ramon Crater, in the middle of the Negev Desert, Israel. We hope this environment will inspire the participants and encourage the type of vibrant participation and intellectual stimulation that has characterized previous INLG meetings.

We would like to thank everybody who helped organize this conference: all the authors and researchers who submitted papers and the program committee who faced a higher than expected load, reviewing in a short period the 70 submissions we have received. Their time, expertise and dedication enabled the selection of this fine sample of Natural Language Generation research. Finally, special thanks to Yael Dahan Netzer who prepared most of everything related to the conference and whose commitment and enthusiasm enabled this conference to be held.

Welcome to the First International Natural Language Generation!

Michael Elhadad Program Chair

#### **Program Committee**

Michael Elhadad, Ben Gurion University, Israel (Chair) Stephan Buseman, DFKI, Germany Graeme Hirst, University of Toronto, Canada James Lester, North Carolina State University, USA Inderjeet Mani, The MITRE Corporation, USA Kathy McCoy, University of Delaware, USA David McDonald, Gensym Corp, USA Dragomir Radev, University of Michigan, USA Jacques Robin, Federal University of Pernambuco, Brazil Donia Scott, University of Brighton, UK Manfred Stede, Technical University, Berlin, Germany Matthew Stone, Rutgers University, USA Ingrid Zukerman, Monash University, Australia

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#### Student Session

Irene Langkilde, University of South California - ISI Charles Brendan Callaway, North Carolina State University James Shaw, Columbia University

#### Local Arrangements

Michael Elhadad, Ben Gurion University, Beer Sheva, Israel Yael Dahan Netzer, Ben Gurion University, Beer Sheva, Israel

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### Conference Program

## Monday, 12 June 18:00 Reception

#### Tuesday, 13 June

Welcome 9:00

#### **Evaluation Session**

9:30	Evaluation Metrics for Generation Srinivas Bangalore, Owen Rambow and Steve Whittaker
10:00	A Task-based Framework to Evaluate Evaluative Arguments Giuseppe Carenini
10:30	Panel on Evaluation (Inderjeet Mani moderator)
11:30	Break

#### **Multilingual Generation**

12:00	An empirical study of multilingual natural language generation. What Should a Text Planner Do? Daniel Marcu, Lynn Carlson and Maki Watanabe
12:30	Document structure and multilingual authoring Caroline Brun, Marc Dymetman and Veronika Lux
13:00	DTD-driven bilingual document generation Arantza Casillas, Joseb Abaitua, Requel Martinez
13:30	Lunch

#### Argumentation

14:45	Using Argumentation Strategies in Automated Argument Generation Ingrid Zukerman, Richard McConachy and Kevin B. Korb
15:15	A strategy for generating evaluative arguments Giuseppe Carenini and Johanna Moore
15:45	Towards the Generation of Rebuttals in a Bayesian Argumentation System Nathalie Jitnah, Ingrid Zukerman, Richard McConachy, and Sarah George
16:15	Break

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#### **New Applications**

16:45	Content aggregation in natural language hypertext summarization of OLAP and Data Mining Discoveries Jacques Robin, Eloi L. Favero
17:15	Optimising text quality in generation from relational databases
17.15	Michael O'Donnell, Alistair Knott, Jon Oberlander and Chris Mellish
17:45	Generating a controlled language Laurence Danlos, Guy Lapalme and Veronika Lux
18:15	Multilingual Summary Generation in a SpeechToSpeech Translation System for Multilingual Dialogues Jan Alexandersson, Peter Poller, Michael Kipp and Ralf Engel

### Wednesday, 14 June

#### **Cognitive Modeling Papers**

9:00	Incremental Event Conceptualization and Natural Language Generation in Monitoring Environments
	Markus Guhe, Christopher Habel, Heike Tappe
9:30	The hyperonym problem revisited: Conceptual and lexical hierarchies in language generation Manfred Stede
10:00	Panel on Cognitive Modeling (R. Klabunde moderator)
10:30	Break

#### **Surface Realization**

11:00	Planning word-order dependent focus assignments Cornelia Endriss and Ralf Klabunde
11:30	Enriching partially specified representations for text realization using an attribute grammar. Songsak Channarukul, Susan W. McRoy and Syed S. Ali
12:00	Coordination and context-dependence in the generation of embodied conversation Justine Cassell, Matthew Stone and Hao Yan
12:30	Lunch

#### Architecture

14:30 *Reinterpretation of an Existing NLG System in a Generic Generation Architecture* Lynne Cahill, Christy Doran, Roger Evans, Chris Mellish, Daniel Paiva, Mike Reape, Donia Scott, Neil Tipper

15:00	An integrated framework for text planning and pronominalisation Rodger Kibble and Richard Power
15:30	Break
15:45	Invited Talk – From lexical-aspectual components to syntax. Nomi Erteschik-Shir & T.R. Rapoport
17:30	Excursion to the Ramon Crater + Banquet

### Thursday, 15 June

#### **Reference Generation**

9:00	Generating Referring Quantified Expressions James Shaw, Kathleen McKeown
9:30	An Empirical Analysis of Constructing Non-restrictive NP Modifiers to Express Semantic Relations Hua Cheng and Chris Mellish
10:00	On identifying sets Matthew Stone

10:30 Break

#### **Planning and Descriptions**

11:00	Generating Vague Descriptions Kees van Deemter
11:30	Capturing the Interaction between Aggregation and Text Planning in Two Generation Systems Hua Cheng and Chris Mellish
12:00	Can text structure be incompatible with rhetorical structure? Nadjet Bouayad-Agha, Richard Power, Donia Scott
12:30	Lunch

#### **Student Session**

14:00	From Context to Sentence Form Sabine Geldof
14:20	<i>The CLEF semi-recursive generation algorithm</i> Rodrigo Reves
14:40	Sentence Generation and Neural Networks Kathrine Hammervold

15:10	Rhetorical Structure in Dialog Amanda Stent
15:30	Break
16:00	<b>Invited Talk</b> – Language Generation and Summarization: Moving Away from Sentence Extraction Kathleen McKeown
17:00	Break

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#### **Demo Session**

17:15	<i>RSTTool 2.4 - A markup Tool for Rhetorical Structure Theory</i> Michael O'Donnell
17:30	Demonstration of ILEX 3.0 Michael O'Donnell, Alistair Knott, Jon Oberlander, Chris Mellish
17:45	A development Environment for an MTT-Based Sentence Generator Bernd Bohnet, Andreas Langjahr and Leo Wanner
18:00	YAG: A Template-Based Generator for Real-Time Systems Susan W. McRoy, Songsak Channarukul and Syed S. Ali
18:15	An Efficient Text Summarizer Using Lexical Chains. H. Gregory Silber and Kathleen F. McCoy

## Friday, 16 June

#### **Generation Resources**

9:00	Robust, applied morphological generation Guido Minnen, John Carroll, Darren Pearce		
9:30	Integrating a Large-Scale, Reusable Lexicon with a Natural Language Generator Hongyan Jing, Yael Dahan Netzer, Michael Elhadad, Kathy McKeown		
10:00	Knowledge Acquisition for Natural Language Generation Ehud Reiter, Roma Robertson and Liesl Osman		
10:30	Break		
11:00	Business Meeting		
13:00	Trip to Masada, the Dead Sea and Jerusalem		

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