Alexander Gelbukh (Ed.)

Computational Linguistics and Intelligent Text Processing

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Volume Editor

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Preface

CICLing 2006 (www.CICLing.org) was the 7th Annual Conference on Intelligent Text Processing and Computational Linguistics. The CICLing conferences are intended to provide a wide-scope forum for discussion of the internal art and craft of natural language processing research and the best practices in its applications.

This volume contains the papers included in the main conference program (full papers) and selected papers from the poster session (short papers). Other poster session papers were included in a special issue of the journal *Research on Computing Science*; see information on this issue on the website. The previous CICLing conferences since 2001 were also published in Springer-Verlag's Lecture Notes in Computer Science (LNCS) series, vol. 2004, 2276, 2588, 2945, and 3406.

The number of submissions to CICLing 2006 was higher than that of the previous conferences: 141 full papers and 35 short papers by 480 authors from 37 countries were submitted for evaluation, see Tables 1 and 2. Each submission was reviewed by at least two independent Program Committee members. This book contains revised versions of 43 full papers (presented orally at the conference) and 16 short papers (presented as posters) by 177 authors from 24 countries selected for inclusion in the conference program. The acceptance rate was 30.4% for full papers and 45.7% for short papers.

The book is structured into two parts subdivided into 14 sections representative of the main tasks and applications of Natural Language Processing:

Computational Linguistics Research

- Lexical Resources
- Corpus-based Knowledge Acquisition
- Morphology and Part-of-Speech Tagging
- Syntax and Parsing
- Word Sense Disambiguation and Anaphora Resolution
- Semantics
- Text Generation
- Natural Language Interfaces and Speech Processing

Intelligent Text Processing Applications

- Information Retrieval
- Question Answering
- Text Summarization
- Information Extraction and Text Mining
- Text Classification
- Authoring Tools and Spelling Correction

The volume features invited papers by **Eduard Hovy** of the Information Sciences Institute, University of Southern California, **Nancy Ide** of the Vassar College, and **Rada Mihalcea** of the University of North Texas, who presented excellent keynote lectures at the conference. Publication of extended full-text invited papers in the Proceedings is a distinctive feature of CICLing conferences. What is more, in addition to presentation of their invited papers, the

Table 1. Statistics of submissions and accepted papers by country or region.

Country	Autl	nors	Pap	$pers^1$	Country	Aut	hors	Pa	$pers^1$
or region	Subm	Accp	Subm	Accp	or region	Subm	Accp	Subm	Accp
Algeria	2	_	1	_	Korea, South	67	17	29	7
Argentina	1	1	0.5	0.5	Lebanon	1	_	1	_
Austria	6	_	1	_	Mexico	51	24	17.65	7.23
Belgium	2	1	1.2	0.2	Netherlands	1	1	0.5	0.5
Brazil	10	10	3.33	3.33	Norway	2	_	1	_
Canada	10	5	5	2	Portugal	6	6	1.5	1.5
Chile	3	_	0.65	_	Romania	2	_	1.5	_
China	68	19	22	5.45	Russia	5	1	2.25	0.25
Costa Rica	1	_	0.5	_	Singapore	1	1	0.25	0.25
Cuba	1	1	0.25	0.25	Spain	49	22	14.1	6
Czech Republic	9	2	5	1	Sweden	2	_	2	_
France	12	1	5.7	1	Taiwan	12	3	4	1
Germany	2	1	0.53	0.33	Tunisia	3	3	1	1
Hong Kong	25	12	9.8	4.8	Turkey	3	_	2	_
India	21	2	10	1	UAE	2	_	1	_
Ireland	4	_	1	_	UK	3	2	0.8	0.6
Israel	3	_	1	_	USA	29	22	11.27	8
Italy	3	2	1	0.5	Uruguay	1	_	0.5	_
Japan	57	18	15.25	5.5	Total:	480	177	176	59

¹ Counted by authors. E.g, for a paper by 3 authors: 2 from Mexico and 1 from USA, we added $\frac{2}{3}$ to Mexico and $\frac{1}{3}$ to USA.

keynote speakers organized separate vivid informal discussions and encouraging tutorials—which is also a distinctive feature of this conference series.

The following papers received the Best Paper Awards and the Best Student Paper Award, correspondingly:

1st Place: Shallow Case Role Annotation using Two-Stage Feature-Enhanced String Matching, by Samuel Chan;

2nd Place: Finite State Grammar Transduction from Distributed Collected Knowledge, by Rakesh Gupta and Ken Hennacy;

3rd Place: Automatic Acquisition of Question Reformulations for Question Answering, by Jamileh Yousefi and Leila Kosseim;

Student: Clustering Abstracts of Scientific Texts using the Transition Point Technique, by David Pinto, Héctor Jiménez-Salazar and Paolo Rosso.

The Best Student Paper was selected out of papers with the first author being a full-time student. The authors of the awarded papers were given extended time for their presentations. In addition, the Best Presentation Award and Best Poster Award winners were selected by a ballot among the participants of the conference.

Besides its high scientific level, one of the success factors of CICLing conferences is their excellent cultural program. CICLing 2006 was held in Mexico, a wonderful country rich in culture, history, and nature. The participants of the

Table 2. Statistics of submissions and accepted papers by topic.²

Topic	Submitted	A	ccepted
Theories and formalisms	9	2	22%
Lexical resources	29	13	44%
	$\frac{29}{35}$	13	$\frac{44}{37}$
Statistical methods and machine learning	35 21	11	$\frac{57\%}{52\%}$
Corpus linguistics			
Morphology	11	5	45%
Syntax (linguistic aspects)	12	4	33%
Parsing (technical aspects)	13	5	38%
Ambiguity resolution	16	9	56%
Word Sense Disambiguation	16	7	43%
Anaphora resolution	3	1	33%
Semantics	29	9	31%
Knowledge representation	26	4	15%
Text generation	4	4	100%
Machine translation	7	1	14%
Discourse and dialogue	8	4	50%
Natural language interfaces	10	3	30%
Speech recognition	8	3	37%
Speech synthesis	2	1	50%
Information retrieval	42	11	26%
Information extraction	25	4	16%
Text mining	26	6	23%
Summarization	6	3	50%
Text categorization	21	4	19%
Text clustering	12	5	41%
Spell checking	2	1	50%
Other: computational linguistics art and craft	12	2	16%
Other: text processing applications	38	13	34%

 $^{^2}$ According to the topics indicated by the authors. A paper may be assigned to more than one topic.

conference had a chance to see the solemn 2000-years-old pyramids of the legendary Teotihuacanas, a monarch butterfly wintering site where the old pines are covered with millions of butterflies as if they were leaves, a great cave with 85-meter halls and a river flowing from it, Aztec warriors dancing in the street in their colorful plumages, and the largest anthropological museum in the world; see photos at www.CICLing.org.

I want to thank all people involved in the organization of this conference. In the first place these are the authors of the papers constituting this book: it is the excellence of their research work that gives value to the book and sense to the work of all other people involved. I thank the Program Committee members for their hard and very professional work on reviewing so many submissions in a short time. Very special thanks go to Manuel Vilares and his group, John Tait and his group, Nicolas Nikolov, Rada Mihalcea, Ted Pedersen, and Oana

Postolache for their invaluable support in the reviewing process. The Best Paper Award selection working group included Alexander Gelbukh, Eduard Hovy, Rada Mihalcea, Ted Pedersen, and Yorick Wiks.

The entire submission, reviewing, and selection process, as well as putting together the Proceedings, was supported for free by the EasyChair system (www.EasyChair.org); I express my gratitude to its author Andrei Voronkov for his constant support and help. I also express my most cordial thanks to the members of the local Organizing Committee for their considerable contribution to making this conference become a reality, and to our sponsoring organization—the Center for Computing Research (CIC) of the National Polytechnic Institute (IPN), Mexico—for hosting the conference. Last but not least, I deeply appreciate the Springer-Verlag staff's patience and help in editing this volume—it is always a great pleasure to work with them.

December 2005 Alexander Gelbukh

Organization

CICLing 2006 was organized by the Natural Language and Text Processing Laboratory of the Center for Computing Research (CIC, www.cic.ipn.mx) of the National Polytechnic Institute (IPN), Mexico.

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The website of CICLing conferences is www.CICLing.org. It contains information on the past CICLing events and satellite workshops, abstracts of all published papers, photos from all CICLing events, and video recordings of some keynote talks, as well as the information on the forthcoming CICLing event. Contact: cicling.org, gelbukh.com; more contact options can be found on the website.

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