

**Advances in
Natural Language Processing**

Research in Computing Science

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Alexander Gelbukh

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Instituto Politécnico Nacional (IPN)
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Av. Juan de Dios Bátiz s/n esq. M. Othón de Mendizábal
Unidad Profesional “Adolfo López Mateos”, Zácatenco
07738, México D.F., México

<http://www.ipn.mx>
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Preface

Natural Language Processing is a branch of Artificial Intelligence aimed at enabling the computers to perform meaningful human-like activities related to written or spoken human language, such as English or Spanish. For traditional computer programs, a text is just a long string of characters—which the program can copy, print, or erase. In contrast, intelligent natural language processing programs are designed for operations involving the meaning of the text.

The most important applications of natural language processing include information retrieval and information organization, machine translation, and natural language interfaces, among others. However, as in any science, the activities of the researchers are mostly concentrated on its internal art and craft, that is, on the solution of the problems arising in analysis or synthesis of natural language text or speech, such as syntactic and semantic analysis, disambiguation, or compilation of dictionaries and grammars necessary for such analysis.

This volume presents 19 original research papers written by 63 authors representing 16 different countries: Argentina, Austria, Canada, China, Finland, Hong Kong, India, Japan, Korea, Lebanon, Mexico, Norway, Spain, UK, United Arab Emirates, and USA. The volume is structured in 7 thematic areas of both theory and applications of Natural Language Processing:

- Lexical Resources
- Morphology and syntax
- Word Sense Disambiguation and Semantics
- Speech Processing
- Information Retrieval
- Question Answering and Text Summarization
- Computer-Assisted Language Learning

The papers included in this volume were selected on the base of rigorous international reviewing process out of 43 submissions received for evaluation; thus the acceptance rate of this volume was 44%.

I would like to cordially thank all people involved in the preparation of this volume. In the first place I want to thank the authors of the published paper for their excellent research work giving sense to the work of all other people involved, as well the authors of rejected papers for their interest and effort. I also thank the members of the Editorial Board of the volume and additional reviewers for their hard work on reviewing and selecting the papers. I thank Sulema Torres, Ignacio Garcia Araoz, Oralia del Carmen Pérez Orozco, and Raquel López Alamilla for their valuable collaboration in preparation of this volume. The submission, reviewing, and selection process was supported for free by the EasyChair system, www.EasyChair.org.

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