Preface

We are honored to present to the reader a special issue of *Research in Computing Science* dedicated to a rapidly developing area of computational linguistics, at the crossroads of computer science, artificial intelligence, and linguistics.

Computational linguistics, also known as natural language processing, plays an important role in the development of modern computer science and has numerous industrial applications. Such industrial giants as Microsoft, Google, and Apple view it as a crucial area of development of user interfaces and numerous information services.

Traditional application areas of natural language processing include machine translation and information retrieval. Nowadays, these areas come in many flavor and with far-reaching extensions. The classical machine translation has evolved into multilingual and cross-lingual natural language processing. Modern state of computational linguistics is characterized by serious attention to world's languages, both minor languages as well as major but under-resourced languages. Accordingly, this volume includes a selection of papers devoted to various aspects of Arabic, Amazigh, Chinese, Romanian, Turkish, Yoruba, and various Indian languages, among others.

On the other hand, information retrieval has evolved into many application areas such as question answering or text summarization. These areas are also represented in this special issue.

In addition, new applications of natural language processing constantly arise. One of such new application fields is sentiment analysis and opinion mining, which leverages the power of social networking and user-generated content for large-scale analysis of opinions the people express in Internet. Such analysis improves the income of companies by suggesting insights into users' acceptance of their products, improves democracy by providing the governments and political parties with real-time feedback from the citizens, and improves ordinary people's quality of life by fueling collaborative recommender systems and providing the consumers with statistics of experience of other consumers with products and services of interest. This volume includes a number of papers on sentiment analysis and opinion mining.

The papers included in this special issue were selected basing on a double-blind review procedure, with participation of 132 leading experts in the topic from 37 countries, listed at the end of this volume.

This special issue will be useful to researchers, students, and engineers working in natural language processing, human language technologies, and computational linguistics.

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Guest Editors

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