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# Advances in Speech and Language Technologies for Iberian Languages

Second International Conference, IberSPEECH 2014  
Las Palmas de Gran Canaria, Spain, November 19-21, 2014  
Proceedings

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# Preface

The Spanish Thematic Network on Speech Technology (RTTH) and the ISCA-Special Interest Group on Iberian Languages (SIG-IL) are pleased to present the selected papers of IberSpeech 2014, Joint VIII Jornadas en Tecnologías del Habla and IV Iberian SLTech Workshop, held in Las Palmas de Gran Canaria, Spain, November 19–21. The Organizing Committee of IberSpeech believes and trusts that we have achieved the quality that the researchers in advances in speech and language technologies for Iberian languages value. To ensure this quality, each article was reviewed by at least three members of the Scientific Review Committee, who provided feedback to improve the final version of the articles in this book.

The conference has become mature as different editions have been organized, starting in Vigo 2010 with FALA and continuing in Madrid 2012 with the new denomination: IberSpeech. This new edition is a step forward the support of researchers in Iberian languages. IberSpeech is a joint event resulting from the merging of two conferences, the “Jornadas en Tecnología del Habla” and the Iberian SLTech Workshop. The first has been organized by the “Red Temática en Tecnologías del Habla” (Spanish Speech Technology Thematic Network, <http://www.rthabla.es>) since 2000. This network was created in 1999 and currently includes over 200 researchers and 30 research groups in speech technology all over Spain. And the second, was organized by the Special Interest Group on Iberian Languages (SIG-IL, <http://www.il-sig.org/>) of the International Speech Communication Association (ISCA). The Iberian SLTech Workshop had its first edition in Porto Salvo, Portugal, in 2009.

As a result, IberSpeech is one of the most important research meetings in the field of speech and language processing focusing on Iberian languages, attracting many researchers (about 140 in the 2014 edition), mainly from Spain, Portugal, and from other Iberian-speaking countries in Latin America. We have also attracted the interest of several research groups from all around the world, including China, United Kingdom, France, Japan, Hungary, Israel, Norway, Czech Republic, and Germany.

Although the main focus is on Iberian languages and the Iberian region, the conference is not restricted to these topics. Proof of this are the ALBAYZIN Technology Competitive Evaluations, organized in conjunction with the conference, which in this edition have attracted the interest of several research groups. The ALBAYZIN Technology Competitive Evaluations have been organized alongside with the conference since 2006, promoting the fair and transparent comparison of technology in different fields related to speech and language technology. In this edition we have two different evaluations: Audio Segmentation and Search on Speech. The organization of each one of these evaluations requires the preparation of development and test data, providing data along with

a clear set of rules to the participants, and gathering and comparing results from participants. This organization was carried out by different groups of researchers and is crucial for the success in participation that we are envisaging. Although results from the evaluations cannot be included in this volume due to timing restrictions, we would like to express our gratitude to the organizers and also to the participants in the evaluations.

We had 60 submitted papers and, after a strict peer-reviewing process, only 29 were selected for publication in this volume of Springer *Lecture Notes in Artificial Intelligence*. This selection was based on the scores and comments provided by our Scientific Review Committee, which includes over 79 researchers from different institutions mainly from Spain, Portugal, Latin America, USA, UK, Hungary, and Czech Republic, to whom we also would like to express our deepest gratitude. Each article was reviewed by at least three different reviewers and authors have had time to address the comments before submitting the camera-ready paper. The articles are organized into four different topics:

- Speech Production, Analysis, Coding and Synthesis
- Speaker and Language Characterization
- Automatic Speech Recognition
- Speech and Language Technologies in Different Application Fields

Besides the excellent research articles included in this volume, the conference had the pleasure of having two extraordinary keynote speakers: Dr. Pedro Gómez Vilda (Departamento de Arquitectura y Tecnología de Sistemas Informáticos de la Universidad Politécnica de Madrid, Spain) and Dr. Roger K. Moore (Department of Computer Science University of Sheffield, UK).

We would also like to thank Springer, and in particular Alfred Hoffmann, for the possibility of publishing this volume, his suggestions in order to increase the spread of the international scope of IberSpeech 2014, his help and great work in preparing it.

Finally, we would like to thank all those whose effort has made possible this conference, the members of the local Organizing Committee, the technical and program chairs, the reviewers and so many people who gave their best to achieve a successful conference.

November 2014

Juan Luis Navarro Mesa  
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