

2009 5th Conference on Speech Technology and Human – Computer Dialogue

(SpeD 2009)

**Constanta, Romania
18 – 21 June 2009**



**IEEE Catalog Number: CFP0955H-PRT
ISBN: 978-1-4244-4727-5**

**Copyright © 2009, Editura Academiei
All Rights Reserved**

******This publication is a representation of what appears in the IEEE
Digital Libraries. Some format issues inherent in the e-media version may
also appear in this print version.***

IEEE Catalog Number: CFP0955H-PRT
ISBN 13: 978-1-4244-4727-5

Additional Copies of This Publication Are Available From:

Curran Associates, Inc
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: (845) 758-0400
Fax: (845) 758-2633
E-mail: curran@proceedings.com
Web: www.proceedings.com

CURRAN ASSOCIATES INC.
proceedings
.com

TABLE OF CONTENTS

Foreword.....	1
<i>Corneliu Burileanu</i>	

PART 1. SPEECH RECOGNITION AND UNDERSTANDING. HUMAN COMPUTER DIALOGUE

Speech Analysis for Automatic Speech Recognition: A Review	5
<i>Jean-Paul Haton</i>	
ProtoLOGOS, System for Romanian Language Automatic Speech Recognition and Understanding (ASRU).....	10
<i>Diana Militaru, Inge Gavai, Octavian Dumitru, Tiberiu Zaharia, Svetlana Segarceanu</i>	
Comparing Various Voice Recognition Techniques.....	19
<i>Tudor Barbu</i>	
Optimizing a Discourse Structuring Component for Utterance Generation in Human- Computer Dialogue	25
<i>Vladimir Popescu, Jean Caelen, Corneliu Burileanu</i>	

PART 2. TEXT-TO-SPEECH SYNTHESIS. REAL-TIME SPEECH- ENABLED COMMUNICATION APPLICATIONS

Assessing the Quality of Voice Synthesizers	32
<i>Horia-Nicolai Teodorescu, Monica Feraru, Marius Zbancioc</i>	
Time-Frequency Processing of Partial for High-Quality Speech Synthesis	42
<i>Amelia Ciobanu, Cristian Negrescu, Dumitru Stanomir, Dragos Burileanu</i>	
A Prosodic Control Module for a Romanian TTS System, Based on Melodic Contour Dictionaries	48
<i>Doina Jitca, Vasile Apopei</i>	
Automatic Rule-based Syllabication for Romanian	54
<i>Stefan-Adrian Toma, Eugeniu Oancea, Doru-Petru Munteanu</i>	
Real-Time Architectures for a Network-Based Text-to-Speech Service Implementation	60
<i>Mihai Surmei, Dragos Burileanu</i>	
Experiments with the Prediction and Generation of Romanian Intonation	66
<i>Arpad Zsolt Bodo, Ovidiu Buza, Gavril Todorean</i>	

PART 3. NATURAL LANGUAGE PROCESSING

Factored Phrase-Based Statistical Machine Translation	75
<i>Dan Tufis, Alexandru Ceausu</i>	
Dynamic Relationship Management for Personality Rich Character Presentations in Interactive Games	82
<i>Manish Mehta, Kinshuk Mishra, Andrea Corradini</i>	

Discourse Theories vs. Topic-Focus Articulation Applied to Prosodic Focus Assignment in Romanian	88
<i>Neculai Curteanu, Diana Trandabat, Mihai Alex Moruz</i>	
General System for Normal and Phonetic Inflection	98
<i>Stefan Diaconescu, Cristi Ingineru, Felicia Codirlasu, Monica Rizea, Oana Bulibasa</i>	
Text Conditioning and Statistical Language Modeling for Romanian Language	108
<i>Jozsef Domokos, Gavril Toderean, Ovidiu Buza</i>	

PART 4. SPEECH AND AUDIO-SIGNAL PROCESSING. SPEECH INTERFACE APPLICATIONS

Speech Recognition in a Smart Home: Some Experiments for Telemonitoring	113
<i>Michel Vacher, Noe Guirand, Jean-Francois Serignat, Anthony Fleury, Norbert Noury</i>	
Practical Variable Step-Size Adaptive Algorithms for Echo Cancellation	123
<i>Constantin Paleologu, Jacob Benesty, Silvin Ciochina, Calin Vladeanu</i>	
Wavelet Analysis for Audio Signals with Music Classification Applications	129
<i>Anca Popescu, Inge Gavut, Mihai Datcu</i>	
Linear Interpolation of Spectrotemporal Excitation Pattern Representations for Automatic Speech Recognition in the Presence of Noise	135
<i>Adriana Stan</i>	

Author Index