Bernadette Sharp and Michael Zock (Eds.)

Natural Language Processing and Cognitive Science

Proceedings of the 4th International Workshop on Natural Language Processing and Cognitive Science NLPSCS 2007

In conjunction with ICEIS 2007
Funchal, Madeira, Portugal, June 2007

INSTICC PRESS
Portugal
Table of Contents

Foreword ................................................................................................................................. iii

Workshop Chairs .................................................................................................................. v

Invited Speaker ..................................................................................................................... v

Program Committee ........................................................................................................... v

Invited Speaker

Ontotherapy, or How to Stop Worrying about What There is.............. 3
Yorick Wilks

Ontology

The Cat and the Brocaded Bag: Using Metaphor Analysis to Computationally Process Creatively Modified Idioms .......... 27
Sylvia Weber Russell, Ingrid Fischer and Ricarda Dormeyer

Who's Next? From Sentence Completion to Conceptually Guided Message Composition ......................................................... 38
Michael Zock, Paul Sabatier and Line Jakubiec-Jamet

Saying is not Modelling ....................................................................................................... 47
Christophe Roche
Semantic Issues
(Representation/Understanding/Modelling)

Semantic Relation Modeling and Representation for
Problem-Solving Ontology-based Linguistic Resources:
Issues and Proposals ............................................................... 59
Francisco Álvarez, Antonio Vaquero, Fernando Sáenz
and Manuel de Buenaga

The Computation of Semantically Related Words: Thesaurus
Generation for English, German, and Russian ..................... 71
Reinhard Rapp

A Linguistically-based Approach to Discourse ..................... 81
Rodolfo Delmonte, Gabriel Nicolae, Sanda Harabagiu
and Cristina Nicolae

The Role of Intensional and Extensional Interpretation in
Semantic Representations – The Intensional and
Preextensional Layers in MultiNet ........................................ 92
Hermann Helbig and Ingo Glöckner

Tools and Techniques

An Efficient Method for Making Un-supervised Adaptation
of HMM-based Speech Recognition Systems Robust
Against Out-of-Domain Data .............................................. 109
Thomas Plötz and Gernot A. Fink

A Machine-learning based Technique to Analyze the Dynamic
Information for Visual Perception of Consonants ............... 119
Wai Chee Yau, Dinesh Kant Kumar and Hans Weghorn

Dictionary Management System for the DEB Development
Platform ............................................................... 129
Aleš Horák and Adam Rambousek
Conceptual Vectors - A Complementary Tool to Lexical Networks

Didier Schwab, Lim Lian Tze and Mathieu Lafourcade

Identifying Boundaries and Semantic Labels of Economic Entities Using Stacking and Re-sampling

Katia Lida Kermanidis

Object Oriented Techniques for an Intelligent Multi-purpose English Language Dictionary System

Samia Yousif and Mansoor Al-A'ali

Sense Abstractness, Semantic Activation and Word Sense Disambiguation: Implications from Word Association Norms

Oi Yee Kwong

NLP Models

Dialogue as Inter-action

Gemma Bel-Enguix and M. Dolores Jiménez-López

A Dialogue Manager for an Intelligent Mobile Robot

Marcelo Quinderé, Luís Seabra Lopes and António J. S. Teixeira

Building Parallel Corpora from Movies

Lavecchia Caroline, Smaili Kamel and Langlois David

Posters

Experiences with the LVQ Algorithm in Multilabel Text Categorization

A. Montejo-Ráez, M. T. Martín-Valdivia and L. A. Ureña-López
Machine Assisted Study of Writers' Rewriting Processes .................. 222

Julien Bourdailet, Jean-Gabriel Ganascia and Irène Fenoglio

Towards a System Architecture for Integrating Cross-modal Context in Syntactic Disambiguation .............................................. 228

Patrick McCrae and Wolfgang Menzel

Author Index .......................................................................................... 239