

ACL-IJCNLP 2009

KRAQ 2009

**2009 Workshop on Knowledge and Reasoning
for Answering Questions**

Proceedings of the Workshop

6 August 2009
Suntec, Singapore

Production and Manufacturing by
World Scientific Publishing Co Pte Ltd
5 Toh Tuck Link
Singapore 596224

©2009 The Association for Computational Linguistics
and The Asian Federation of Natural Language Processing

Order copies of this and other ACL proceedings from:

Association for Computational Linguistics (ACL)
209 N. Eighth Street
Stroudsburg, PA 18360
USA
Tel: +1-570-476-8006
Fax: +1-570-476-0860
acl@aclweb.org

ISBN 978-1-932432-50-3 / 1-932432-50-7

Foreword

The introduction of reasoning capabilities in question-answering (QA) systems appeared in the late 70s. A second generation of QA systems, aimed at being cooperative, emerged in the late 80s - early 90s. In these systems, quite advanced reasoning models were developed on closed domains to go beyond the production of direct responses to a query, in particular when the query has no response or when it contains misconceptions. More recently, systems such as JAVELIN, Inference WEB or Cogex, operating over open domains, gradually integrated inferential components, but not as advanced as those of the 90s. Performances of these systems in the recent TREC-QA tracks show that reasoning components substantially improve the response relevance and accuracy. They can also potentially be much more cooperative. However, there is still a long way before being able to produce accurate, cooperative and robust QA systems, because of the very large complexity of natural systems and of the need to make several communities work together on common grounds.

Recent foundational, methodological and technological developments in knowledge representation (e.g. ontologies, knowledge bases incorporating various forms of incompleteness or uncertainty), in advanced reasoning forms (e.g. data fusion-integration, argumentation, decision theory, fuzzy logic, incomplete knowledge bases, etc.), in advanced language processing resources and techniques (for question processing as well as for generating responses) including semantic role labelling and the recognition and resolution of temporal and spatial expressions, and recent progress in HLT and formal pragmatics (user models, intentions, etc.) make it possible to foresee the elaboration of much more accurate, cooperative and robust systems dedicated to answering questions from multimedia supports or from textual data, from e.g. online texts or web pages, operating either on open or closed domains. The user interface aspects (input, output (e.g. SMS or advanced interfaces), on line help, dialogue, etc.) are also crucial for the viability of such systems.

We thank very much the Programme Committee for producing accurate reviews.

Patrick Saint-Dizier and Marie-Francine Moens (Co-chairs).

Organizers

Co-chairs:

Patrick Saint-Dizier, stdizier@irit.fr

Marie-Francine Moens, Marie-Francine.Moens@cs.kuleuven.be

Program Committee:

Sivaji Bandyopadhyay (India)

Johan Bos (Italy)

Gosse Bouma (The Netherlands)

Brigitte Grau (France)

Kentaro Inui (Japan)

Asanee Kawtrakul (Thailand)

Jochen Leidner (USA)

Sien Moens (Belgium)

Matteo Negri (Italy)

Silvia Quarteroni (Italy)

Alan Ramsay (UK)

Patrick Saint-Dizier (France)

Tomek Strzalkowski (USA)

Michael Wiegand (Germany)

Table of Contents

<i>Knowledge and Reasoning for Medical Question-Answering</i> Pierre Zweigenbaum	1
<i>The Development of a Question-Answering Services System for the Farmer through SMS: Query Analysis</i> Mukda Suktarachan, Patthrawan Rattanamanee and Asanee Kawtrakul	3
<i>QAST: Question Answering System for ThaiWikipedia</i> Wittawat Jitkrittum, Choochart Haruechaiyasak and Thanaruk Theeramunkong	11
<i>Some Challenges in the Design of Comparative and Evaluative Question Answering Systems</i> Nathalie Lim, Patrick Saint-Dizier and Rachel Roxas	15
<i>Addressing How-to Questions using a Spoken Dialogue System: a Viable Approach?</i> Silvia Quarteroni and Patrick Saint-Dizier	19

Conference Program

Thursday, 6 August 2009

- 13:50–14:00 Welcome Address
- 14:00–15:00 Invited Talk, Pierre Zweigenbaum
Knowledge and Reasoning for Medical Question-Answering
- 14:00–15:00 *Knowledge and Reasoning for Medical Question-Answering*
Pierre Zweigenbaum
- 15:00–15:30 *The Development of a Question-Answering Services System for the Farmer through SMS: Query Analysis*
Mukda Suktarachan, Patthrawan Rattanamanee and Asanee Kawtrakul
- 15:30–16:00 Coffee Break, Level 3, Suntec
- 16:00–16:20 *QAST: Question Answering System for ThaiWikipedia*
Wittawat Jitkrittum, Choochart Haruechaiyasak and Thanaruk Theeramunkong
- 16:20–16:40 *Some Challenges in the Design of Comparative and Evaluative Question Answering Systems*
Nathalie Lim, Patrick Saint-Dizier and Rachel Roxas
- 16:40–17:00 *Addressing How-to Questions using a Spoken Dialogue System: a Viable Approach?*
Silvia Quarteroni and Patrick Saint-Dizier
- 17:00–17:30 Invited Talk, Manfred Stede
Question Answering: Reasoning, Mining, or Crowdsourcing?

