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Proceedings of the workshop

KRAQ'06: Knowledge and Reasoning for Language Processing

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Preface

Recent foundational, methodological and technological developments in advanced language processing resources and techniques, knowledge representation, advanced reasoning forms not necessarily based on unification, applied pragmatics, and recent progress in HLT make it possible to foresee the elaboration of much more accurate, cooperative and robust systems dedicated to NLP in general and to answering questions in particular. The development of more robust evaluation techniques make it also possible to identify results, weaknesses and future directions.

The goal of this workshop is to enhance cooperation between participants with an AI background and the NLP community. After the 2005 edition, associated with IJCAI in Edinburgh, the 2006 version of this workshop is organized around major questions of interest to a number of NLP, AI, HLT and pragmatics people. Besides Question-Answering, which is a hot topic in this perspective, the workshop addresses areas of NLP that require knowledge and reasoning to perform better.

The following topics and the main points addressed during the workshop:

- Reasoning aspects: dedicated inference schemas (in semantics, in pragmatics and in interpretation phases), intelligent information processing, resolving redundancies or inconsistencies, e.g. via fusion in NLG, search criteria expansion models (e.g. relaxation techniques) in QA, inference in summarization, and reasoning under uncertainty or with incomplete knowledge, e.g. in dialogue.
- Knowledge representation and integration: levels of knowledge involved in NLP (e.g. ontologies, domain knowledge), and their relations to language, knowledge extraction models and techniques, and coherence and integration.
- Flexible and interactive systems possibly including a user model,
- Language processing: question processing, language generation (e.g. lexical choice, planning), use of language resources to develop reasoning schemas (e.g. lexical semantics relations), reasoning to resolve ambiguities or references, explanation production (showing sources and inferences, reporting data incompleteness, etc.), argumentation, and intelligent language tutoring systems.

Farah Benamara and Patrick Saint-Dizier, co-organizers

KRAQ'06:

Knowledge and Reasoning for Language Processing

Workshop Organizers:

Farah Benamara and Patrick Saint Dizier, IRIT, France

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Mathiew Stone, Center of Cognitive Science, Rutgers, USA

Invited speakers

Farah Benamara, IRIT, France Gosse Bouma, Information Science Rijksuniversiteit Groningen, NL. Dominique Laurent: Synapse, France.

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