

Preface

Human language technologies promise solutions to challenges in human computer interaction, information access, and knowledge management. Technical advances in areas such as indexing, retrieval, transcription, extraction, translation, question answering and summarization offer new capabilities for learning, playing and conducting business. This includes enhanced awareness, creation and dissemination of enterprise expertise and know-how.

This two day workshop aims to bring together computational linguists working across a spectrum of technology areas to report advances in human language technology (HLT) as applied to knowledge management (KM). A second aim is to formulate and refine a road map for human language technologies for the next decade. The workshop and proceedings is organized around a series of areas including content extraction, ontology creation, question answering, summarization, multilingual and multimedia processing, and dialog. Knowledge management challenges addressed by participants include but are not limited to:

- *Expert Discovery*: Modeling, cataloguing and tracking of distributed individual and communities of experts.
- *Knowledge Discovery*: Identification and classification of knowledge from unstructured multimedia data.
- *Knowledge Sharing*: Awareness of and access to enterprise expertise and know-how.

Human language technology promises solutions to these challenges through capabilities such as:

- Automated retrieval, extraction, and enrichment of information and knowledge from multimedia, multilingual, and multiparty information sources.
- Translingual or crosslingual retrieval, presentation, and sharing of knowledge.
- Automated detection and tracking of emerging topics from unstructured multimedia data (e.g., documents, web, video news broadcasts).
- Use of knowledge sources to facilitate knowledge mapping and access (e.g., lexicosemantic resources such as WordNet, specialized ones such as geospatial Gazetteers, and semistructured ones such as thesauri, encyclopedia, and fact books)
- Automated question-answering from heterogeneous sources
- Intelligent tools that support the automated bibliometrics and document analysis/understanding in support of discovery of distributed experts and communities of expertise
- Summarization and presentation generation of knowledge (e.g., knowledge maps, lessons learned).
- Modeling of user knowledge, beliefs, plans, (dis) abilities and preferences from queries, created artifacts, and human computer interactions.

Through expert panels and group discussion, participants intend to establish a road map for the Human Language Technologies for the next decade. The road map will comprise an analysis of the present situation, a vision of where we want to be in ten years from now, and a number of intermediate milestones that would help in setting intermediate goals and in measuring our progress towards our goals. During this discussion participants intend to formulate grand challenge problems, discuss possible data sets and/or evaluation metrics/methods that could form the basis of more scientific methods, articulate the role of and necessary advances in human language technology to solve these challenges, as well as identify and characterize early innovations and issues (e.g., robustness, scalability, privacy).

Any international workshop demands the selfless contributions of many individuals. We first thank the authors and participants for their important contributions. We next thank the Organizing Committee for their time and effort in providing detailed and high quality reviews and counsel. In addition we thank ELSNET for establishing the workshop web site (<http://www.elsnet.org/acl2001-hlt+km.html>). And we are confident the workshop participants will join us in thanking Paula MacDonald at MITRE for her excellent administrative workshop support. Finally we would like to acknowledge the organizational support of The MITRE Corporation and the financial support of ELSNET (European Network of Excellence in Human Language Technologies).

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Sponsored by

European Network of Excellence in Human Language Technologies (ELSNET)

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