

Call for Papers

for the Track

Conceptual Analysis and Ontological Modeling in Information Systems

(Anwendung der Konzeptanalyse und ontologische Modellierung in der Wirtschaftsinformatik)

at the Multikonferenz Wirtschaftsinformatik (MKWI) 2010, 23. - 25.02.2010

Venue:

Georg-August-Universität Göttingen

Track-Chairs:

Prof. Dr. Heinz Dreher, Curtin University of Technology, Perth, Australien

Prof. Dr. Stefan Voß, Universität Hamburg (Coordinator)

Dr. Torsten Reiners, Universität Hamburg

Bob Williams, Blue Wren

Content:

With Web 2.0, the creation of digital content using all types of media accelerated as a result of increasing Internet accessibility, social communities who share and collect information as well as improved applications allowing everyone to become a producer. The current usage of tags and asynchronous linking provides a means to reveal some basic structural elements within the vast 'repositories of knowledge' and generally in the seemingly endless proliferation of data but ignores the needs of (basic) users with respect to differentiate expert knowledge from 'data' (opinion, unverified reports, and other material disguised amateurish gossip and musings. Users wish to retrieve precise results on questions asked in imprecise natural languages, and to overcome any cultural or language barrier, or to extract additional information such as context, temporal relationships, concept interconnectedness, and alternative media documents representing like content.

The next generation of the Web is called 3.0 and is supposed to be 'intelligent' in that it emphasizes machine-facilitated understanding of information by incorporating, for example, semantic networks, machine learning, autonomous agents, artificial intelligence and distributed databases. Of especial importance is the 'understanding' of content by applications, requiring agents to operate autonomously, and the provision of service oriented architectures where missing components are automatically searched for and integrated and provided via a natural interface to the user.

One popular approach for progressing issues relating to concept 'understanding' being used in recent times is ontology based. Ontologies are an explicit, formal specification of common conceptual classification schemes and generally describe a hierarchy of concepts using a subsumption relation. From a theoretic understanding, ontologies also describe semantic relations between concepts allowing the distinguishing of different objects with the same identifier (domain knowledge). Concepts represent the meaning behind 'objects', i.e. to understand and express similarity or differences among objects, provide a classification, and identify objects as belonging. Conceptual analysis is the examination and analysis of texts to identify and mark concepts for 'understanding', detecting the context, or scenario, and other forms of sophisticated information-rich structures.

This track reviews the state-of-the-art theories and applications of conceptual analysis in the context of information Science. The importance of understanding the content rather than manipulating and managing the documents is increasing as the amount of data is not longer manageable by humans, especially considering influences by language, culture and required expert knowledge. Three scenarios with importance for Information Science are

- (1) plagiarism,
- (2) text mining, and
- (3) machine translation evaluation

whereas all have in common that most implementations are still based on explicit word group comparison. That is, for plagiarism tuples or triplets of words are searched in databases to find similarities, not handling translations, synonyms or rewriting of ideas. Conceptual Rubrics is an emerging topic that moves us beyond "string of text" comparisons. Conceptual analysis uses the concepts and compares these as well as its order/structure to find similarities in between documents, search requests or translated documents, whereas similarity is not given by grammar or vocabulary but understanding in a socio-cultural context. For plagiarism and machine translation evaluation, aligned terminologies databases can be used to match concepts in different languages and therefore settle these technologies on an international market.

Possible themes for contributions:

- Knowledge Representation
- Terminology Databases / Alignment
- Ontological models and systems
- Ontology based analysis
- Information Retrieval / Concept Retrieval
- Text Mining
- Evaluation of Machine Translation
- Plagiarism Detection and Analysis
- Scenario Building and Evaluation
- Automated Essay Grading
- Concept Searching, Analysis, and Evaluation
- Concepts in a Socio-Cultural Context
- Concept Rubrics
- ...

Program comitee:

- Prof. Dr. Heinz Dreher, Curtin University of Technology, Perth, Australien
- Dr. Christian Gütl, Universität Graz
- Dr. Felix Mödritscher, WU Wien
- Prof. Dr. Alan Rea, Western Michigan University
- Dr. Torsten Reiners, Universität Hamburg
- Prof. Dr. Stefan Voß, Universität Hamburg

Review process and submissions:

Papers can be submitted in German or English und should fit to the style sheet of the MKWI 2010. Papers should not exceed a total length of 12 pages (full version).

All contributions will be reviewed at least double-blind by a program committee. Please **re-move** name, address etc. from the submitted papers and also meta-data from the submitted Word- / PDF-documents.

The style sheet is available at <http://www.mkwi2010.de/calls/formatvorlage/>.

Papers can only be submitted within one track/one sub-conference. Authors should submit their contributions by using the ConfTool at <http://www.mkwi2010.de/>.

Publication:

Accepted papers will be published as short version (2 pages) in the proceedings, published by the Göttinger Universitätsverlag. Full versions of accepted papers will be stored on CD which will be part of the proceedings. Additionally, full versions of accepted papers will be made available in the publication repository of the Staats- und Universitätsbibliothek Göttingen and will be linked within the literature reference systems.

Additionally the best contributions are designated for subsequent journal publication in an extended version (more than 12 pages).

Publishing of an accepted paper in the proceedings requires at least one of the authors attending the MKWI 2010 and paying the conference fee.

Dates:

04.10.2009:	Deadline for submission of papers
02.11.2009:	Notification of Acceptance
20.11.2009:	Deadline for submission of final papers
23. - 25.02.2010:	MKWI 2010