Workshop on Matching and Meaning 2010

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1 PROGRAMME CHAIRS

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2 INTRODUCTION

The problem of semantic misalignment - of two (or more) systems failing to understand one another when their semantic representation is not identical - occurs in a huge variety of areas: the Semantic Web, databases, natural language processing; anywhere, indeed, where semantics are necessary but centralised control is undesirable or impractical.

The advantages of semantic fluidity clash with the communication difficulties this fluidity leads to. It is therefore essential to develop tools to facilitate automated development or evolution of ontologies as it becomes apparent that the existing representation is insufficient or inappropriate for the task at hand, and for interpreting the links between seemingly disparate ontologies.

These problems are often addressed offline, assuming that full information about all concerned ontologies is available. However, in highly dynamic domains, where interactions are between a large, diverse and evolving community, it is not practical to manually pre-align all concerned ontologies, and it is sometimes not possible to have complete access to all such ontologies. Such integration must be done dynamically and automatically.

The aim of this workshop is to bring together researchers interested in the problems of automated development, evolution and interpretation of ontologies in the many different domains in which it occurs. We are primarily interested in the exchange of ideas and the stimulation of debate, and the workshop is intended to be a forum for researchers to present ongoing work and ideas and to engage in discussion with other researchers from the field. We are particularly interested in novel ideas and innovative research, which may be in its early stages, and encourage reports on work in progress.

2.1 TOPICS

Topics of interest, include but not limit to:

- Ontology evolution
- Ontology matching and alignment
- Ontology versioning
- Representational or structural change
- Formal aspects of ontology dynamics
- Formalisation of and reasoning with contexts
- Foundational issues
- Social and collaborative matching
- Background knowledge in matching
- Extensions to ontology languages to better support change
- Non-monotnic reasoning for ontologies and the Semantic Web
- Inconsistency handling in evolving ontologies
- Uncertainty in matching
- Change propagation in ontologies and metadata
- Ontologies for dynamic environments
- Dynamic knowledge construction and exploitation
- Matching for dynamic applications (e.g., p2p, agents, web-services)
- Case studies, software tools, use cases, applications
- Open problems

3 PROGRAMME COMMITTEE

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