IM**SC**OM

:IMSC Ontology Manager

Faculty :   Prof. Dennis McLeod. Computer Science

Students :   Seokkyung Chung, Hyun Woong Shin,
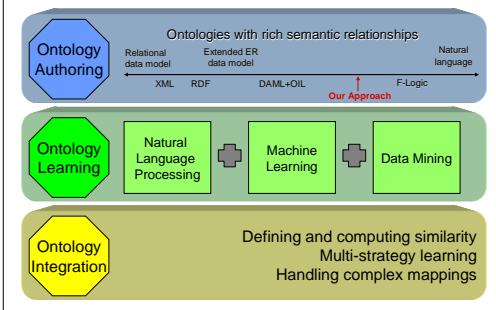   Sang-Soo Sung

Research Goal

• Motivation

  • Manually constructing and integrating ontologies are tedious and error-prone tasks

  • A firm collection of high level modeling primitives is needed

• Goal

  • Semi-automated ontology construction and integration

  • Support high accessibility and multiple views for ontology presentation
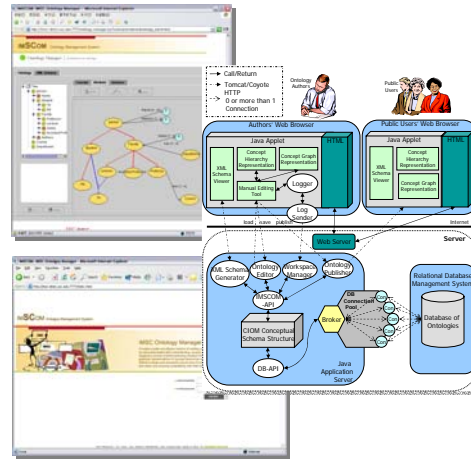
  • Focused on a powerful semantic model

Role in IMSC

IMSCOM project will be applicable to a broad range of ontology-related projects at IMSC

• Communication vision project: an immersive environment for trainees and experts

• Crisis management in Homeland Security Center project - CREATE

• News story structuring

• Topic/event detection from data streams

Research Approach

Accomplishments

• Publication

  • L.Khan, D. McLeod, and E. H. Hovy. Retrieval effectiveness of an ontology-based model for information selection. *The VLDB Journal*, 13(1):71-85, 2004.

Uniqueness and Related Work

5-Year Plan

Year 4

* Develop semi-automated ontology-integration system

Year 3

* Develop semi-automated ontology-learning system
* Develop ontology import/export system

Year 2

* Support richer semantic inter-relationships
* Develop workspace management system