

## Theme III. Description

<b>Topic</b>
Ontology Visualization with Multiple Concept Relations

<b>Methods</b>	<b>Research area</b>
Optimization Programming	Semantic Web and Data Ming

<b>Description</b>
<b>Background</b> Semantic Web is the most active area, which mostly benefits from the Ontology and AI technology. However, there is lacking of a real formal domain Ontology and to build such Ontology is tedious or impossible task. Currently, heterogeneous Ontologies developed by different systems are using. Therefore, several important challenges come up, e.g., Ontology building, merging, and mapping, visualization. Moreover, how to visualize Ontology with their slots and instances is a great challenge, especially when there is more than one relation specified.
<b>Task</b> Our group has already build prototype (named WSAO), one part of which is called, <b>OntoViz</b> , an eclipse plug-in for visualizing Ontology, developed based on WSMT-Viz by using JPowergraph2.0 and touchgraph programming. What we need to do is to update as a web-based tool with 3D programming and enrich it with some new functions.

<b>Prerequisites</b>	<b>Desirable priories knowledge</b>
Programming skills in Java Eclipse, Web-based programming;	Semantic Web & Ontology

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