Department of Mathematics, Statistics and Computer Science
St. Francis Xavier University
presents

Mobile Agent Driven Ontology Based Service Enabled Workflow

by
Mostafijur Rahman
St. Francis Xavier University
M.Sc. Thesis Proposal Presentation

Monday, December 8th @ 1:00pm in Annex 23A

A Service is a self-contained unit of functionality or solution that is placed in a location or is performed to provide a repeatable and consistent set of outcomes, deliverables, and performances to people, organizations, and systems. Web Service (WS) is the technology that makes services available as consumable entities which can be accessed and consumed through computers, such as an online shopping service. SOA is an approach to build distributed systems that deliver application functionality as services which are language and platform independent. Advances in Information and Communication Technology (ICT) have influenced service providers to improve their infrastructure so that consumers can consume their services through smart phone driven applications or agents. An ontology provides machine interpretable definitions of basic concepts in a domain together with relations among them. Semantic Web Service (SWS) is a standalone piece of functionality that is self-descriptive, machine readable and can be automatically discovered and executed from the web. In this research we plan to integrate the notions of SWS with workflow. By exploiting the notion of Service Enabled Workflow (SEW), we provide an integrated software tool to design and develop Ontology Based Service Enabled Workflow. Semantic web services for tasks in a workflow, more closely aligned to the needs of the user through the use of ontologies, will be discovered, selected and executed dynamically by a smart phone based software agent. A case study involving a workflow describing a clinical practice guideline will be discussed.