Agents and the Semantic Web

Papers from the AAAI Fall Symposium

Terry Payne & Valentina Tamma, Cochairs

Technical Report FS-05-01

AAAI Press
Menlo Park, California
Contents

Dynamic Sub-Ontology Evolution for Collaborative Problem Solving / 1
  Yuxin Mao, William K. Cheung, Zhaohui Wu, and Jiming Liu

SEA: A Semantic Web Services Context-aware Execution Agent / 9
  António Lopes and Luis Botelho

Integrating Language Understanding Agents into the Semantic Web / 17
  Akshay Java, Tim Finin, and Sergei Nirenburg

Integrating Knowledge Modeling and Multi-Agent Systems / 25
  Mario Gomez and Enric Plaza

A Temporal Aggregates Ontology in OWL for the Semantic Web / 30
  Feng Pan

Web Service Composition as a Planning Task: Experiments
  Using Knowledge-Based Planning / 38
  Erick Martinez and Yves Lespérance

Service Level Agreements for Semantic Web Agents / 47
  Nir Oren, Alan Preece, and Tim Norman

Semantic Web Service Composition Planning with OWLS-Xplan / 55
  Matthias Klusch, Andreas Gerber, and Marcus Schmidt

Integrating Agents, Ontologies, and Semantic Web Services
  for Collaboration on the Semantic Web / 63
  Michael Stollberg and Thomas Strang

Protocols for Web Service Invocation / 71
  Christopher D. Walton

OWLS-MX: Hybrid OWL-S Service Matchmaking / 77
  Matthias Klusch, Benedikt Fries, Mahboob Khalid, and Katia Sycara

Template-based Composition of Semantic Web Services / 85
  Evren Sirin, Bijan Parsia, and James Hendler

Interleaving Semantic Web Reasoning and Service Discovery
  to Enforce Context-Sensitive Security and Privacy Policies / 93
  Norman Sadeh and Jinghai Rao

Preparing Semantic Agents for an Unsuspecting
  and Unreliable World / 103
  Luke K. McDowell