Preface

Semantic technologies have been gaining momentum in various e-science areas. For example, W3C has established a new interest group for semantic web health care and life science, which is charted to develop and support the use of semantic web technologies and practice to advance collaborative, integrative, translational research in the health care and life science domain. Recently, there has been more and more urgent needs for developing semantic-based methodologies, tools, middleware to facilitate scientific knowledge modeling, logical-based hypothesis checking, semantic data integration and application composition, integrated knowledge discovery and data analyzing in a variety of e-science applications.

Partially influenced by the artificial intelligence community, semantic web researchers have largely focused on formal aspects of semantic representation languages or general-purpose semantic application development, with inadequate consideration of requirements from specific scientific community. On the other hand, general science researchers are growing ever more dependent on the web, but they have no coherent agenda for exploring the emerging trends on the semantic web technologies. Advances in e-science infrastructure and e-science applications based on the semantic technologies and related knowledge-based approaches calls for increased interaction among these disparate communities. The AAAI-07 Semantic e-Science workshop is aimed to provide an inter-disciplinary forum for researchers coming from both the semantic web community, and general science communities.

For this year's event, we received 25 submissions in total. Each paper was assigned with at least two reviewers, and among them, 8 papers were accepted as regular paper, and 4 as short paper. The covered topics include data integration, service composition, data privacy and trust, data mashup, data policy, data provenance, and semantic data mining. The applications have encompassed biomedicine, geology, citizen science, earth science, and social science. We have been witnessing an increasing interest and endeavors in the semantic web technologies in numerous scientific domains. We believe the semantic technologies will play more and more importance role in accelerating and facilitating scientific research cycles.

Huajun Chen (Zhejiang University and Yale University)
Yimin Wang (University of Karlsruhe)
Kei Cheung (Yale University)
Zhaohui Wu (Zhejiang University)