

Lecture Notes in Artificial Intelligence 5465

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Debbie Richards Byeong-Ho Kang (Eds.)

Knowledge Acquisition: Approaches, Algorithms and Applications

Pacific Rim Knowledge Acquisition Workshop, PKAW 2008

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Revised Selected Papers



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Preface

With the growing recognition of the pivotal role that knowledge plays in the sustainability, competitiveness and growth of individuals, organizations and society, finding solutions to address the knowledge acquisition bottleneck is even more important today than in the early stages of this field. The knowledge acquisition community is interested in topics spanning from the fundamental views on knowledge that affect the knowledge acquisition process and the use of knowledge in knowledge engineering to the evaluation of knowledge acquisition techniques, tools and methods.

As a field within the larger field of artificial intelligence (AI), solutions incorporating other areas of AI such as ontological engineering, agent-based technology, robotics, image recognition and the Semantic Web are common, as are knowledge acquisition methods related to other fields of computing such as databases, the Internet, information retrieval, language technology, software engineering, decision support systems and game technology. Many solutions are application focused addressing real-world problems such as knowledge maintenance and validation, reuse and sharing, merging and reconciliation within a wide range of problem domains.

The Pacific Knowledge Acquisition Workshops (PKAW) have provided a forum for the past two decades for researchers and practitioners in the Pacific region and beyond who work in the field of knowledge acquisition. PKAW covers a spectrum of techniques and approaches ranging from manual knowledge acquisition from a human expert to fully automated knowledge acquisition using machine-learning or data-mining methods.

This volume seeks to disseminate the latest solutions from the Pacific Knowledge Acquisition Workshop 2008 (PKAW 2008) held in Hanoi, Taiwan during December 15-16, 2008 in conjunction with the Pacific Rim International Conference on Artificial Intelligence (PRICAI 2008). The workshop received 57 submissions from 14 countries. From these, we accepted 15 papers (26%) for full presentation and another 14 for short presentation. All papers were blind reviewed by at least three members of the Program Committee. This volume contains a selection of these papers further revised following workshop discussions. The papers demonstrate a balance of theoretical, technical and application-driven research, many papers incorporating all three foci. Approximately half the papers reflect the increasing use of Web-based data for knowledge discovery and management.

The Workshop Co-chairs would like to thank all those who were involved in PKAW 2008 including the PRICAI 2008 Organizing Committee, PKAW Program Committee members, those who submitted papers and reviewed them and

of course the authors, presenters and attendees. We warmly invite you to participate in PKAW 2010 anticipated to be held in Seoul, Korea in conjunction with PRICAI 2010.

March 2009

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