2019 Pacific Rim Knowledge Acquisition Workshop (PKAW 2019)

Welcome to the 2019 Pacific Rim Knowledge Acquisition Workshop (PKAW 2019) to be held at Fiji on August 26-30, 2019. Over the past two decades, PKAW has provided a forum for researchers and practitioners working in the area of knowledge acquisition and machine intelligence (MI, also Artificial Intelligence, AI).

PKAW 2019 will be collocated with the 16th Pacific Rim International Conference on Artificial Intelligence (PRICAI 2019, http://www.pricai.org/2019/). The purpose of this workshop is to provide a chance for intensive discussion on the aspects of knowledge acquisition and AI.

In recent years, unprecedented data, called big data, has become available and knowledge acquisition and learning from big data is increasing in importance. Various knowledge can be acquired not only from human experts but also from diverse data. Simultaneous acquisition from both data and human experts increases its importance. Multidisciplinary research including knowledge engineering, machine learning, natural language processing, human computer interaction, and artificial intelligence are required. We invite authors to submit papers on all aspects of these area.

Especially, according to the Gartner Hype Cycle for Emerging Technologies 2017, AI is one of the top emerging technology mega-trends. Artificial intelligence is changing the way in which organizations innovate and communicate their processes, products and services. Also in our daily life, AI embedded devices such as the smart speaker is about to become widely used, which extends the possibility of acquiring knowledge from users' behavior observed through the interaction between those devices and their users.

Another important and related area is applications. Not only in the engineering field but also in the social science field (e.g., economics, social networks, and sociology), recent progress of knowledge acquisition and data engineering techniques is realizing interesting applications. We also invite submissions that present applications tested and deployed in real-life settings. Those papers should address lessons learned from application development and deployment.

All papers will be peer reviewed, and those accepted for the workshop will be included in the Springer LNAI proceedings.

TOPICS OF INTEREST

Papers are invited for consideration in all aspects of knowledge acquisition, engineering and management for intelligent systems, including (but not restricted to):

- Fundamental views on knowledge that affect the knowledge acquisition process and the use of knowledge in knowledge engineering

- Algorithmic approaches to knowledge acquisition

- Tools and techniques for knowledge acquisition, knowledge maintenance and knowledge validation

- Evaluation of knowledge acquisition techniques, tools and methods

- Languages and frameworks for knowledge and knowledge modelling information systems or decision support systems

- Methods and techniques for sharing and reusing knowledge

- Ontology and its role in knowledge acquisition

- Mining the Semantic Web, the Linked Data and the Web of Data

- Hybrid approaches combining knowledge engineering and machine learning

- Innovative user interfaces

- Big data capture, representation and analytics

- Crowd-sourcing for data generation and problem solving

- Software engineering and knowledge engineering

- Algorithms, tools and techniques for machine intelligence

- Knowledge acquisition applications tested and deployed in in real-life settings

IMPORTANT DATES (tentative)

- Submission Due: March 8, 2019

- Notification: June 4, 2019

- Camera Ready Due: June 15, 2019

- Workshop Date: August, 26-27, 2019

Honorary Chairs

Prof. Paul Compton,   University of New South Wales, Australia

Prof. Hiroshi Motoda,   Osaka University, Japan

Workshop Co-Chairs

Prof. Kouzou Ohara,   Aoyama Gakuin University, Japan

Dr. Quan Bai,   Auckland University of Technology, New Zealand

Publicity Chair

    Dr. Soyeon Caren Han, University of Sydney, Australia

Advisory Committee

    Prof. Maria R Lee,   Shih Chien University, Taiwan

    Prof. Kenichi Yoshida,   University of Tsukuba, Japan

    Prof. Byeong-Ho Kang,   University of Tasmania, Australia

    Prof. Deborah Richards, Macquarie University, Australia