

Message from the Co-Chairs

Now the knowledge is recognized at least as important as physical, financial capital and natural resources for the economic growth. It is the fundamental means to improving the efficiency and effectiveness of production and distribution process, improving the quality and quantity of products, and increasing the choice of products and services for consumers and producers. It is also crucial to leverage the comprehensive power of a nation. Knowledge has always been significant to our civilization. However, in the past decade this significance has grown to a level where it is coming to dominate other socio-economic factors. This recent development challenges many of institutions to understand the nature of knowledge and its role in applications, to effectively utilize the knowledge for improving the corporate competitive advantage and national comprehensive power, as well as establishing and development of knowledge sciences.

The significant feature of development of knowledge sciences is the interdisciplinary program on an international scale. We need to promote the exchange and interaction of knowledge across disciplines and borders to explore the new territories and new frontiers. In the present stage, attempts to strictly define the knowledge science may be too ambitious, but a very tolerant, broad-based and open minded approach to the discipline can be taken. Knowledge sciences and systems sciences can be used for one another as methodology and tool and benefit each other. Around these disciplines, the first International Symposium on Knowledge and Systems Sciences, initiated and organized by Japan Advanced Institute of Science and Technology (JAIST), was held in September 2000 at the JAIST (KSS'2000), then KSS'2001 at Dalian, China, KSS'2002 at Shanghai, China, KSS'2003 at Guangzhou, China, KSS'2004 at Ishikawa, Japan, KSS'2005 at Laxenburg, Austria, and KSS'2006 at Beijing, China.

An international society for Knowledge and Systems Sciences was formally established during KSS2003. Now members of the society spread over ten countries. As an annual meeting of the society, this year, the eighth symposium, KSS'2007, jointly with KICSS2007, will be held at Ishikawa, Japan with the support from the 21st century COE (Center of excellence) program in JAIST. This COE program is a vehicle to integrate theory and practice, to combine knowledge in social sciences and knowledge in natural science, to produce new theories, and finally to create a new research field called the study of scientific knowledge creation. The central purpose of the Symposium is continuously broaden and deepen the view of Knowledge Sciences and search the way for the further development of the theory and application of knowledge disciplines.

This proceedings include papers accepted by KSS'2007 and cover the scope of theory and application of Knowledge and Systems Sciences in different aspects. We would like to thank all the authors who have submitted papers and all the program committee members for their help to make the symposium a scientific success.

Yoshiteru Nakamori, Zhongtuo Wang, Jifa Gu

October, 2007

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