

# The 2008 IEEE International Conference on Information Reuse and Integration

## FORWARD

by

**Stuart H. Rubin, Ph.D. and Shu-Ching Chen, Ph.D.**

We would like to extend our warmest welcome to each and every conference attendee. This is the sixth annual IEEE IRI conference. Our conference has matured and attracted many people from academia, industry, and government to present, discuss, and exchange ideas that address real-world problems with real-world solutions. We have another very successful conference this year with strong support from the authors and attendees from around the globe who have submitted their papers for presentation at the conference, exchanged their research ideas, and will interact with each other in conference social events and who continue to build and strengthen the IRI society.

The last several decades have witnessed the creation of a tremendous amount of information and artifacts from the development of large and complex software systems. To meet the challenge of the increasing criticality of software within systems and developing complex systems of systems, it is of pivotal importance to have disciplined ways to reuse and integrate existing information and artifacts. Toward such a goal, researchers in the field have studied issues in the capture, maintenance, integration, validation, extrapolation, and application of knowledge. Various methodologies and techniques have been developed for information reuse and integration in areas such as AI, multimedia, networking, software and systems engineering, and telecommunications.

In particular, trends in IRI R&D, during the past year, have pointed up the importance of recent developments in the theory of perceptions as it applies to computation with words (CW) in the presence of uncertainty. As it turns out, CW serves to minimize the human-machine imped-

ance mismatch and may for instance enable the development of computer tutors of unprecedented utility. As we make progress in areas pertaining to how the brain makes possible knowledge discovery, we may endow our machines with such capabilities. This further serves their potential as tutors and beyond.

We are happy to report that the IEEE Transactions on Systems, Man, and Cybernetics (SMC) Part C: Applications & Reviews, Special Issue on Information Reuse and Integration, has been very successful. We received more than 90 submissions and will be able to publish a maximum of seven papers. This demonstrates the high quality of the special issue and the attendant strong interest in information reuse and integration topics from the global research community.

Finally, we would like to thank the organizing and program committee members for their dedication and notable effort on behalf of the conference. Without their help, it would not have been possible to produce this successful and wonderful conference. We also thank the IEEE SMC society for their support of the IRI conferences as well as for their commitment to and assistance in helping us to achieve our stated goals.

*Stuart H. Rubin*

GENERAL Co-CHAIR, IRI-2008  
SPAWAR SYSTEMS CENTER (SSC)  
San Diego, CA, USA

*Shu-Ching Chen*

GENERAL Co-CHAIR, IRI-2008  
FLORIDA INTERNATIONAL UNIVERSITY  
Miami, FL, USA

July 13-15, 2008