

## Introduction: A journal pivotal to the future of Web intelligence and agent systems

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Welcome to Web Intelligence and Agent Systems (WIAS): An International Journal!

There are several reasons why the timing for the début of the WIAS journal is perfect.

First, after the bubble burst of the dot-coms, we are now in a fast transition to emerging technologies. We are experiencing a strong demand for more powerful computing paradigms. One apparent case is the demand for new computing resources in terms of scalability, availability, and manageability – something that has never been paralleled.

In 1985, the NSFnet that connected the National Science Foundation supercomputers centers, was merely operating a 56 Kb/s. Today, the centers are connected by a 40 Gb/s TeraGrid network.

Second, the demand for large-scale data handling, exploration, and management has never been slowed down. Data production is at an exponential growth rate. For instance, it has been estimated by 2006, several physics projects, among them CERN's large Hardon Collider (LHC), will produce multiple petabytes ( $10^{15}$  byte) of data per year for analysis.

Third, WIAS, as both intelligent media and contents at the same time, will not only bring strangers together across country boundaries, but also facilitate human and social intelligence development and understanding. For instance, WIAS will facilitate the development of new cultures and even the understanding of the universe that we live in. Today, researchers have already used the Web as an analogy on how our brain functions.

Advances in such areas as Grid computing and Agent Technology will soon provide even richer metaphors and experiments to expand our understanding of new universe and biological realities.

In light of the above demands and potentials, the WIAS journal can provide a valuable source of information on the latest research and development in the forefront areas of computing, in particular, Web Intelligence, Wisdom Web, Grid and Cluster Computing, Multi-Agent Systems, Autonomy-Oriented Computing, Self-Organizing Communities, and Social Network Intelligence, among others.

The WIAS is an official journal of Web Intelligence Consortium (WIC, <http://wi-consortium.org/>) and has a formal tie with IEEE/WIC International Conferences on Web Intelligence (WI) and Intelligent Agent Technology (IAT). We would like to invite everyone, who is interested in WI and IAT related research and development activities, to join the WIC and to attend the IEEE/WIC conferences. By joining the WIC and/or attending the IEEE/WIC conferences, you will have a chance to get a free subscription of the journal.

In closing, we would like to thank all the members of the WIAS editorial board, associate editors, and the WIAS publisher, IOS Press, for engaging in this meaningful endeavor.

*Jiming Liu and Ning Zhong*  
Editors-in-Chief