

## **Call for papers**

### **IETE Technical Review**

#### **Special Issue on "Advances on Soft Computing: Theory and Applications"**

##### **Guest Editors**

Jason J. Jung, Yeungnam University, Korea

Ngoc Thanh Nguyen, Wroclaw University of Technology, Poland

##### **Motivation and Theme**

The research fields of machine learning and data mining have received a great deal of attention in recent years and, beyond doubt, have established themselves as main cornerstones of intelligent systems design. Learning and extracting patterns from data is inseparably connected with various types of uncertainty, including randomness, vagueness, incompleteness, inconsistency and imprecision, which may concern both the input and output of a learning method as well as its internal representations of models or patterns. Probability theory is an established methodology for handling uncertainty in a proper way, and is widely used in machine learning and data mining. Yet, it is becoming more and more apparent and accepted among researchers that probability does not capture all relevant forms of uncertainty equally well, and that other mathematical tools currently developed under the umbrella term "soft computing", notably fuzzy sets and related uncertainty formalisms, can complement classical probability in a reasonable way.

In this special issue, we focus on recent advances in the use of soft computing methods in machine learning and data mining. We especially welcome contributions on the use of formal frameworks for reasoning under uncertainty such as, e.g., probabilistic and Bayesian methods, fuzzy sets and fuzzy logic, possibility theory, evidence theory, rough set theory, and information theory, to machine learning and data mining, including but not limited to data preprocessing, model induction (e.g., classification, regression), pattern mining and analysis (e.g., association rules, subgroup mining, clustering, novelty detection), formal concept analysis, handling of incomplete and heterogeneous data, analysis of non-stationary data and mining data streams, interactive and online data mining, mining at multiple levels of abstraction, incorporation of background knowledge, and visualization and presentation of data mining results.

##### **A list of invited Authors**

We are planning to invite about 15 best papers from Asian Conference on Intelligent Information and Database Systems (ACIIDS 2010 <http://aciids2010.hueuni.edu.vn/>) held in Vietnam. The authors will be asked to submit their papers with significant improvement and author guideline of IETE TR.

After the regular (two blind) review and revision process, about 10 papers will be accepted to be published in this issue.

##### **Important Dates**

Deadline of First Submission: April 30th 2010

Notification of First Review: May 30th 2010

Deadline of Revised Submission: June 30th 2010

Notification of Final Result: July 15th 2010

Deadline of Camera Ready Submission: July 30th 2010

## Soft Bios of Guest Editors

Professor Jason J. Jung (j2jung@gmail.com)

He is an assistant professor of Computer Engineering Department at Yeungnam University, Korea. He was a postdoctoral researcher in INRIA Rhone-Alpes, France in 2006, and a visiting scientist in Fraunhofer Institute (FIRST) in Berlin, Germany in 2004. He received the B.Eng. in Computer Science and Mechanical Engineering from Inha University in 1999. He received M.S. and Ph.D. degrees in Computer and Information Engineering from Inha University in 2002 and 2005, respectively. His research topics are knowledge engineering on social networks by using machine learning, semantic Web mining, and ambient intelligence. He has about 25 international journal articles published in Knowledge-Based Systems, Information Retrieval, Information Processing & Management, Knowledge and Information Systems, and Expert Systems with Applications. Also, he is an editorial member of Journal of Universal Computer Science and International Journal of Intelligent Information and Database Systems. Moreover, he has been editing 10 special issues in Information Sciences, Journal of Network and Computer Applications, Computing and Informatics and so on.

Professor Ngoc Thanh Nguyen (Ngoc-Thanh.Nguyen@pwr.wroc.pl)

He is a professor of Computer Science at Wroclaw University of Technology, Poland, and the head of Knowledge Management Systems Department in the Faculty of Computer Science. His scientific interests consist of knowledge integration methods, collective intelligence, intelligent technologies for conflict resolution, inconsistent knowledge processing, multi-agent systems, and E-learning methods. He has edited 20 special issues in international journals, 6 books and 6 conference proceedings. He is the author of 4 monographs and about 180 other publications. His latest monograph entitled "Advanced Methods for Inconsistent Knowledge Management" has been published by Springer 1st year. Prof. Nguyen serves as Editor-in-Chief of International Journal of Intelligent Information and Database Systems; Editor-in-Chief of two book series: Advances in Applied Intelligence Technologies and Computational Intelligence and its Applications for IGI Global Publishers (USA); Associate Editor of Neurocomputing, International Journal of Innovative Computing & Information Control, Journal of Information Knowledge System Management and KES Journal; and a Member of Editorial Review Boards of several other prestigious international journals. He serves also as an expert for Ministry of Science and Higher Education and Ministry of Regional Development of Poland in evaluating R&D projects. He is the Chair of KES Symposium Series on Agent and Multi-agent Systems. He has been General Chair or Program Chair of more than 10 international conferences. Prof. Nguyen has been selected as the Vice-President of International Society of Applied Intelligence (ISAI); Senior Member of IEEE and ACM, the largest computer science societies in the world. He is also an expert of European Commission in evaluation research projects and an expert of Polish Ministry of Science and Higher Education and Slovakia Research Agency. He is also the Associate Chair of KES International and many other functions in international societies like IFIP, WIC etc.