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In this issue, we highlight the recognition to Prof. Janusz Kacprzyk with the Kaufmann Prize that is awarded by SIGEF and FEGL. A report on the International Seminar on Computational Intelligence 2006, held in Tijuana is offered. Reports on the Distinguished Lectures delivered by Prof. Witold Pedrycz and Prof. Jacek Zurada are also presented.

### KAUFMANN PRIZE IS AWARDED TO PROF. JANUSZ KACPRZYK

Prof. Janusz Kacprzyk will be awarded with the VI Kaufmann Prize, Gold Medal for Research into Fuzzy Management. The ceremony will take place at the Reus City Hall on January 22, 2007 at 8 p.m. (Reus, Spain). The Kaufmann Prize has been instituted by the International Association for Fuzzy-Set Management and Economy (SIGEF) and the Foundation for the Study of Fuzzy Management (FEGL) in memory and in honor of Professor Arnold Kaufmann, mathematician, engineer, teacher and writer, but, above all, an exemplary person and an excellent researcher, who produced a wide variety of publications and made many contributions to the field of fuzzy mathematics and logic.

The Kaufmann Prize aims to publicly honor those scientists who make outstanding contributions to the field of Management and Economy in a changing environment by developing and applying techniques for dealing with uncertainty.

The Kaufmann Prize is a gold medal designed by the Catalan sculptor Josep M. Subirachs bearing the name of the winning researcher. Past Kaufmann Prize laureates are:

Hans Jürgen Zimmermann, RWTH Aachen, Germany  
George Klir, Binghamton University, USA  
Madan M. Gupta, University of Saskatchewan, Canada  
Jaime Gil Aluja, University of Barcelona, Spain  
Lotfi A. Zadeh, University of California, Berkeley, USA

## REPORT ON THE INTERNATIONAL SEMINAR ON COMPUTATIONAL INTELLIGENCE 2006

The International Seminar on Computational Intelligence, organized by the Mexican Chapter of the Computational Intelligence Society, was held in Tijuana, Mexico, October 9-11. This is the third edition of the International Seminar, with the first meeting on 2004 in Tijuana, followed by the second meeting on 2005 in Mexico City. The General Chair of the Seminar is Prof. Patricia Melin, and the Co-Chairs of the Technical Program are Prof. Oscar Castillo and Prof. Eduardo Gomez-Ramirez. The technical program consisted of 2 distinguished lectures, 6 invited lectures, and 26 regular paper presentations. The first distinguished lecture was delivered by Prof. Witold Pedrycz from the University of Alberta, Canada on October 9<sup>th</sup> with the theme “Human-Centric Constructs of Granular Computing and Fuzzy Logic”. The second distinguished lecture was delivered by Prof. Jacek Zurada on October 10<sup>th</sup> from the University of Louisville, USA with the theme “Neural Networks for Selected Data Mining Tasks”. The first day of the seminar, a tutorial on “Type-2 fuzzy logic: Theory and Applications” was delivered by Juan Ramon Castro (Ph.D. student of Prof. Oscar Castillo). The invited lectures were delivered by international recognized experts in Fuzzy Logic, Neural Networks and Genetic Algorithms that work in Mexican Institutions. The regular papers were mostly presented by graduate students from all around Mexico, and a Best Paper award competition was held to recognize outstanding work from the students.

The International Seminar of Computational Intelligence was organized for the third time. The event was held at Hotel Palacio Azteca Tijuana in Tijuana, Mexico on October 9-11, 2006. For the inauguration event on October 9, our Distinguished Lecture, Prof. Witold Pedrycz, participated in the inauguration for the seminar. The dean of the Computer Science Department of the Tijuana Institute of Technology was also present at the event. After the inauguration event, the distinguished lecturer of the IEEE, Prof. Witold Pedrycz, from the University of Alberta, Canada, gave interesting lecture. There were also 26 regular paper presentations on the technical program of the seminar the web page is [www.hafsamx.org/cis-chmexico/seminar06](http://www.hafsamx.org/cis-chmexico/seminar06). The attendance for the opening ceremonies and these lectures was about 70 persons, including 40 IEEE members from the chapter.



Opening Ceremony of ISCI'2006

## **DISTINGUISHED LECTURE BY PROF. WITOLD PEDRYCZ**

After the inauguration event of ISCI'2006, from the IEEE distinguished lecturer Program, Prof. Witold Pedrycz, gave interesting lecture on his area of research. On October 9, Prof. Pedrycz talked about “Human-Centric Constructs of Granular Computing and Fuzzy Logic”.

Prof. Pedrycz talked about Human-centric systems and human-centric computing (HC<sup>2</sup>) that constitute an innovative and visible trend in modern information technology are inherently associated with the usage of heterogeneous and highly distributed data. The data usually come from a broad range of sources including users, designers, networks of sensors and distributed databases. Various pursuits along the line of e-society including intelligent housing, semantic web and web intelligence, e-health, e-commerce, intelligent data analysis, and wearable hardware are examples of the tendency of the highly collaborative processing present in the development of HC<sup>2</sup> systems.



**Prof. Pedrycz delivering his lecture.**



**Prof. Witold Pedrycz answering questions after the talk.**

He discussed various aspects of human-centricity in the setting of the design of granular models and demonstrated how the topology of such models hinges upon collections of information granules and associations between them. In this talk, he also proposed a collaborative scheme of forming information granules whose crux lies in the formation of interaction linkages between the data nodes that are established at the granular level. A general taxonomy of the interaction mechanisms (emerging under the umbrella of so-called C<sup>3</sup> paradigm) is introduced and studied.



**Prof. Pedrycz receiving his diploma for the talk from the chair of the IEEE CIS Mexico Chapter, Prof. Patricia Melin.**

## **DISTINGUISHED LECTURE BY PROF. JACEK ZURADA**

On October 10 the IEEE Distinguished Lecturer, Prof. Jacek Zurada delivered an interesting lecture on “Neural Networks for Selected Data Mining Tasks”. The opening part of the talk introduces basic premises of data mining. It is shown how paradigms of neurocomputing prove useful and effective for data mining. These are data-driven modeling, feature extraction, dimensionality reduction, visualization, knowledge extraction and logic rule discovery. Such modeling often involves handling of heterogeneous, subjective, imprecise and noisy data. This part concludes with providing overview of various model-building tasks, which can be performed by neural networks.



**Prof. Zurada delivering his lecture.**

The second part of the presentation outlines the concept of dimensionality reduction of the input data vectors. This technique leads to reduced models achieved through evaluation of sensitivity

matrices of perceptron networks. When developing reduced models it is also useful to eliminate underutilized internal weights and, possibly, also neurons via pruning techniques. The concluding part of the talk reviews the capabilities of perceptron networks for producing understandable IF-THEN rules.

## **ANNOUNCEMENT**

We invite all members of IFSA to send us their contributions for publication in the next edition of the newsletter. The information that you can send are: Articles, Conference Reports, Call for Papers, Conference Calendars, and all other news that you consider can be of interest for IFSA members. For your contribution send an e-mail to [ocastillo@tectijuana.mx](mailto:ocastillo@tectijuana.mx).