

Last September, in occasion of the fifth Argentinean Symposium on Artificial Intelligence (V ASAI), all of the attendants had the satisfaction to see the great evolution of the discipline in this region. This growth, since these techniques arose as effective problem solving methods for every day life in the first half of the past century, had not a direct correlation in our country since the creation of this event within the SADIO's Congress. From the first ASAI in 1999, up to nowadays, a good quantity of valuable activity in AI can be shared among researchers and entrepreneurs, in a high level forum, with a pleasant climate.

In this fifth ASAI, 26 papers were accepted for presentation, after a thorough refereeing process. Three reviewers from a high-qualified international Scientific Committee carefully evaluated each work. These works were punctuated taking into account its originality, presentation, relevance of the results, and general quality. The five ones with the highest scores were selected to be published in this special issue of the Electric Journal of SADIO.

Then, in this volume, we will be able to enjoy the paper from the team of Carolina Monard at the University of Sao Paulo@Sao Carlos, Brazil, *A Method for Refining Knowledge Rules Using Exceptions*, in which they present a contribution to the data mining problem with the knowledge-based approach. In this particular task, to manage exceptions is not at all a trivial difficulty. The solution proposed was tested upon real data in the HIV virus protein cleavage process.

A second work is about the use of an interface agent, called WATSON, to learn user's preferences so as to give him/her personalised assistance when doing computer-based tasks. The WATSON approach uses association rules and was tested over an agenda system, yielding promising results. This work, *Using Association Rules to Learn User's Assistance Requirements*, was developed by Analía Amandi and associated researchers, at ISISTAN in Univ. Nacional del Centro Prov. Bs. As., Argentina.

The remaining three articles form a set that may be included under the recently appeared term of computational intelligence, involving fuzzy logic, genetic algorithms and artificial neural networks.

In the article *Parameter estimation in nonlinear time-varying systems through Takagi-Sugeno fuzzy models and wavelets*, Aldo Cipriano and his team at Pontificia Univ. Católica de Chile, present an interesting method to identify dynamic systems. They developed a toolbox for the Matlab software utilising non-linear fuzzy models and parameter estimation based on wavelets, which was tested in two examples: a TS fuzzy dynamic system and the Mackey-Glass chaotic series.

An implementation of a multi-objective genetic algorithm was employed to build a sensor network for industrial processes. The work *Initial Sensor Network Design with a Multi-Objective Genetic Algorithm*, by Ignacio Ponzoni et al, at PLAPIQUI and Univ. Nacional del Sur, Argentina, although tested in small application examples shows viability in larger, industrial situations.

In the last article, a tool for the implementation of artificial neural networks directly in the silicon is presented in *NNGen: a powerful tool for the implementation of Artificial Neural Networks on a chip*. In this work Marcelo Tosini and I, at INTIA-INTELYMEC in Univ. Nacional del Centro Prov. Bs. As., Argentina, present the software that outcome sentences in hardware description language (VHDL) directly to program neural networks in the logic of a field programmable gate array (FPGA) type device. The testbed used showed once more that artificial neural networks are powerful to predict temporal series.

We are all conscious of our limitations to follow up the technology of countries with stable and smarter educational and scientific policies. Then we consider the efforts of SADIO through JAIIO and EJS, and all similar events done with the voluntary work of generous people, as a great help in the direction to improve the life quality of this part of the planet inhabitants.

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Sc. Committee President