

## Electronic Journal of SADIO Special Issue on ASAI 2007

### Introduction

The Argentinean Symposium on Artificial Intelligence (ASAI) is an annual event intended to be the main forum of the Artificial Intelligence community in Argentina. The 9th Argentinean Symposium on Artificial Intelligence was held during August 27th - 28th, 2007 in Mar del Plata Argentina and was part of the 36th JAIIO, the 36th Argentine Meetings on Informatics and Operations Research, organized by SADIO.

ASAI 2007 received 33 articles, which were evaluated by an International Program Committee composed of representatives of different Artificial Intelligence areas. A total of 18 articles were selected and presented at the symposium. The technical sessions included topics such as Machine Learning & Data Mining, Neural Networks, Evolutionary Computation, Agents & Multi-Agent Systems, Natural Language Processing & Intelligent Information Retrieval, Bioinformatics and Pattern Recognition.

This special issue contains a selection of four articles from ASAI 2007. The first article, *An Immune-based Approach to Student Diagnosis*, by Carine G. Webber and João Luís Tavares da Silva from the Universidade de Caxias do Sul (Brazil) discusses how techniques inspired on the Human Immune System can be used to solve diagnosis problems. In this research work, the authors show how these techniques can be applied in an educational environment for learning basic programming skills.

The next article, *A hybrid wrapper/filter approach for feature subset selection* by Ronaldo C. Prati, Gustavo E. A. P. A. Batista and Maria Carolina Monard from the University of São Paulo at São Carlos (Brazil) introduces a novel feature subset selection algorithm for supervised classification tasks that uses a combination of several quality criteria measures.

The third article, *On Artificial Gene Regulatory Networks* by Jessica A. Carballido and Ignacio Ponzoni from the Universidad Nacional del Sur (Argentina) presents and overview of the problem of representing dependencies between genes and their products during protein synthesis at the molecular level. The authors review several formalisms that have been used to represent artificial gene regulatory networks as well as machine learning techniques that have been applied to this problem.

The last article in this special issue, *Using Neural Networks to improve classical Operating System Fingerprinting techniques* by Carlos Sarraute and Javier Burrioni from Core Security Technologies (Argentina) proposes a novel technique that applies neural networks to the field of information security. The authors discuss a novel approach to solve the problem of remote Operating System Detection, also known as the OS Fingerprinting problem.

We want to thank the authors and reviewers of these articles as well as all those who collaborated to make ASAI 2007 a success. In particular we wish to thank SADIO for their assistance in organizing the symposium. Finally, we want to express our gratitude to EJS for publishing this special issue, which reflects some of the latest research results in our community.

Dra. Daniela Godoy (dgodoy@exa.unicen.edu.ar)  
ISISTAN - Facultad de Ciencias Exactas, UNCPBA - CONICET

Dra. Ana Gabriela Maguitman (agm@cs.uns.edu.ar)  
Departamento de Ciencias e Ingeniería de la Computación - UNS - CONICET