Preface to the SCCC'2010 Special Issue

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This special issue of the CLEI Electronic Journal consists of extended and revised versions of articles presented at the XXIX International Conference of the Chilean Computer Science Society, which took place in Antofagasta, Chile, in November 2010.

The conference received 100 submissions, from which the program committee selected 45 for presentation. Among the presented articles the conference chairs selected 12 papers, which were extended and revised for the CLEI Electronic Journal. Such selection was done based on the articles evaluation score and the recommendation of the conference sessions chairs. After two reviewing rounds seven articles were accepted to be published in this special issue.

Three of these articles deal with structural challenges from software systems:

The *paper 1*, by Juan Manuel Rodriguez, Marco Crasso, Cristian Mateos, Alejandro Zunino and Marcelo Campo, presents a catalog of guidelines to build service-oriented applications and services. The article also describes a plug-in for the Eclipse IDE, which simplifies the use of the guidelines.

The *paper 2*, by Eduardo B. Fernandez and Sergio Mujica, proposes a model-based approach to propagate security restrictions in two dimensions: along the lifecycle and the architectural levels of a system. This approach facilitates the security analysis of the system and can be used to verify compliance of such system with particular regulations.

The *paper 3*, by Verónica Bogado, Silvio Gonnet and Horacio Leone, presents a discrete events simulation model for evaluating quality attributes, using the software architecture of a system. The evaluation results help software architects to make accurate decisions about the system design.

Three selected articles mix algorithms and artificial intelligence to reach several goals:

The *paper 4*, by Manuel Bozzo, Martín Gutierrez and Tomas Bozzo, describes a system named J-GAVIS that finds effects to imitate voice signals. The system addresses most limitations existing in its predecessor known as GAVIS (Genetic Algorithm based Voice Imitation System).

The *paper 5*, by Thelma Elita Colanzi, Wesley Klewerton Guez Assunção, Aurora Trinidad Ramirez Pozo, Ana Cristina B. Kochem Vendramin, Diogo Augusto Barros Pereira, Carlos Alberto Zorzo, and Pedro Luiz de Paula Filho, explores three different bio-inspired metaheuristics to deal with the clustering problem. Moreover the article proposes some refinements to be applied to these metaheuristics in order to improve their performance.

The *paper 6*, by Matias Lee and Pedro R. D'Argenio, introduces and defines semantics to the notion of observability of interactive systems. This approach gives important insight about the security model of an interactive system.

Finally, the last paper addresses the challenge of analyzing the formalization of the scrum software process:

The *paper 7*, by Julio Ariel Hurtado Alegría, María Cecilia Bastarrica and Alexandre Bergel, shows how the use of a software tool named AVISPA can help analyze the specification of the scrum software process. Such tool can be also used to analyze other software processes in order to find error patterns.

The guest editors want to thank all people involved in this special issue, particularly to the authors and the reviewers that spent an important effort to make possible this new number of the CLEI Electronic Journal. We want also thanks to Editor-in-Chief of the journal for offering us the opportunity of preparing this special issue. We hope that you enjoy the reading!

Sergio F. Ochoa, Federico Meza and Ignacio Casas, special issue editors

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