

Preface to the CIbSE/ESELAW 2012 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 XV Ibero-American Conference on Software Engineering (CIbSE 2012) and the IX Experimental Software Engineering Latin American Workshop (ESELAW 2012), which took place in Buenos Aires, Argentina, in April 2012.

Aiming at being one of the main scientific events in Software Engineering in the region, CIbSE fosters profitable discussions about scientific works and innovative ideas among researchers, students, educators and other professionals of the area. The IX Experimental Software Engineering Latin American Workshop (ESELAW) was one of the co-located workshops and had indisputable quality, focusing on highly relevant topics within the Experimental Software Engineering realm.

It is relevant to mention some of the numbers of these events, so as to give the reader an impression of how competitive these research forums have been. CIbSE'12 has received 77 research papers, representing 11 countries (Brazil, Argentina, Uruguay, Chile, Spain, Colombia, Mexico, Cuba, Portugal, Austria, and Belgium). From these, 20 have been accepted as full papers and 5, as short papers. The acceptance rate for full papers has been 27%. Moreover, 77 PC members of 15 distinct nations have been responsible for the paper selection process. As for ESELAW'12, from 20 submitted papers, 8 have been accepted full papers (40% acceptance rate). The 32 PC members covered 6 countries, 3 from which were represented among the submissions.

Here follows the three elected best papers at CIbSE'12:

- Paper 1, by Passos, Dias-Neto and Barreto, describes the results of a systematic review aiming at the discovery of the organizational values that impact software process improvement initiatives. Organizational values are responsible for guiding the behavior and attitudes of the members of an organization. Such values, many times ignored, may be responsible for many of the successes and failures of organization's strategies in general. Thus, such review becomes quite relevant. Some of the benefits of this paper are eliciting and describing fourty of these values, and pointing out which are the more relevant ones in the context of software process improvement;
- Paper 2, by Morales, Oktaba, Ventura and Torres, focuses on the need for process reference models, specifically for small and medium software development organizations. The paper introduces a qualitative and quantitative approach for measuring the gap between ISO/IEC 29110 and MoProSoft level 2 as well as suggests several recommendations to adopt the Basic Profile of the new international standard starting from the Mexican standard. The fact of dealing with such important and widespread standards is one of the strengths of this paper, being particularly relevant for practitioners in software development;

- Paper 3, by Stroppi, Chiotti and Villarreal, proposes an extension to the WS-HumanTask architecture developed to provide support to the Resource Perspective of BPEL processes. Given the relevance of Service-orientation both for researchers and practitioners, this paper becomes a must-read, also because it focuses on the relation of this topic and Business Process (BP) Modeling, specifically focusing on workflow-enabled BPs.

Other relevant articles from CibSE 2012 those are included in this CLEI Electronic Journal special issue are:

- Paper 4, by Ordiales, Crasso, Mateos and Zunino, correlates web services interfaces (of java programs, with interfaces written in WSDL) with software engineering metrics to measure code quality, especially the metrics of Chidamber and Kemerer for object-oriented programs;
- Paper 5, by Abrantes and Travassos, proposes to assess pertinence and relevance of agility characteristics and agile practices for software processes. As results, 16 agility characteristics and 15 agile practices were considered pertinent to insert agility in software processes;
- Paper 6, by Steiner, Masiero and Bonifácio, applies a Software Product Line (SPL) approach in the domain of Unmanned Aerial Vehicle (UAV), aiming at using the SPL's potential in this domain which is highly rich in variability, thus being a candidate for techniques such as the ones applied in SPL.
- Paper 7, by Gomes, Conte and Oliveira, presents two case studies carried out in partnership with two companies in order to evaluate and improve a usability inspection technique specific for Web applications.

Finally, four relevant articles from ESELAW 2012 deal with Experimental Software Engineering:

- Paper 8, by França and Travassos, characterizes simulation-based studies, identifying the common simulation strategies into the Software Engineering field;
- Paper 9, by Brito and Dias-Neto, presents the application of a methodology based on the conduction of primary studies to develop a new checklist-based technique for inspection of software testing artifacts;
- Paper 10, by Menezes Junior, Gusmão and Moura, presents a set of indicators that support the risk assessment in environments of multiple software development projects. The methodology to define and evaluate these indicators is also discussed; and
- Paper 11, by Rivero, Barreto and Conte, characterizes usability inspection methods through the analysis of a systematic mapping study extension.

We hope these articles will be valuable contributions to the development of Software Engineering in Ibero-America.

We would like to thank all people involved in this undertaking, from the authors to the reviewers for their effort and work, and CibSE/ESELAW steering committee and CLEI for offering us the opportunity of preparing this special issue.

Finally, we hope you will enjoy the reading!

Luca Cernuzzi, Renata Guizzardi, and Ellen Francine Barbosa, special issue editors