EDITORIAL

In this Lumber of Computation and Systems, members of our scientific community present six articles about methodologies and algorithms for the design of programs, the interaction among programmers, the search of information, resource optimization, and robotics.

In the next paragraphs our readers will find the context in which each reported work is located. Each of these works is broadly motivated by the needs of our modern society that each time better understands the utility of computation and imagines new applications. Society claims for immediate and correct answers. It is required that programs are implemented and executed quickly not also in parallel but under a collaborative environment that allows to better exploit and intellectual resources.

First we have parallelism, where design is not obvious and much less automatic. Each program’s version has a different behaviour. Performance depends on the design. How to evaluate among different alternatives of a program? Definitely, implementing each one of them is impossible. Jorge Ortega proposes using UML State Diagrams to estimate average execution time of a parallel program. This work makes possible to evaluate alternatives explore the most promising ones and obtain good approximations.

Parallelism allows us to distribute tasks that are not only reserved to processors. This concerns programmers too. In this sense, Moran et al. propose and evaluate a system for programming in pairs. Who has not had a distance meeting through one of the teleconference systems or through a chat system? Moran et al. describe the architecture of a collaborative editor which allows programmers to work in the design of distributed systems in a distributed way.

When handling great volumes of data, information recovery becomes a complex problem where it turns out prohibitive to cross a database completely. The indexation method or that one that one that allow measuring the degree of similarity between two structures greatly influences quality of the results. In this number of Computation and Systems two papers approach the subject of information recovery. The first one by Felipe-Riveron et al. uses time series for color matching, a method very easy to understanding, proposed, implemented and experimented by its authors. The second work by Ledo Mezquita et al. proposes a new method that allows finding the correct sense of words composing the description of the searches information. This method takes advantage of content to improve quality of the results.

The applications of the works presented in Computation and Systems are varied, Romero et al. shows it with a real case by representing the dynamic behaviour of a water distribution system. Efficient use of water depends on the design and configuration of their distribution networks. Romero et al. propose using evolving optimization methods to multiple objectives.

Finally, Gorrostieta and Vargas Soto contribute a work in the area of robotics and fuzzy logic. Their work proposes a set of necessary algorithms for the displacement of a spider robot: stability, control and locomotion. These algorithms are evaluated through two simulators.

Contents of this number show that today computation is everywhere and none of the modern professions can avoid it. The research lines have an ample perspective where it is required of an interdisciplinary work.
The editors of Computation and Systems trust that it will find each time more readers and enthusiastic authors. We thank the reviewers for their magnificent work carried out and invested time, the authors for their patience and quality of work and the readers for their opinions. Each of these roles makes possible the existence of Computation and Systems.

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