

# **A Pattern Language-based Approach for Framework Construction and Instantiation**

Rosana T. Vaccare Braga<sup>1</sup>  
Paulo Cesar Masiero<sup>2</sup>  
ICMC-Universidade de São Paulo  
{rtvb, masiero}@icmc.sc.usp.br

## *Abstract*

In this work we propose an approach for using pattern languages as important sources for framework construction and instantiation. Beginning with the experience acquired during software development in a specific domain, a pattern language can be constructed. Then, the pattern language can be used during the construction of a framework for the same domain, specially for hot spots identification and for designing the framework architecture. The pattern language can also be used during the framework instantiation for specific applications. We intend to propose a generic process for framework construction using pattern languages: a) to build a white box framework to implement each pattern of the pattern language, as well as other classes to deal with more generic aspects (for example, object persistence, graphical user interface, security, etc.); b) to build a wizard to help in the framework instantiation, also based on the pattern language. This is an innovating proposal for framework architecture, which will be based on the patterns of the associated pattern language.

---

<sup>1</sup> Financial support from FAPESP – process number 98/13588-4

<sup>2</sup> Financial support from CNPq and FAPESP