Electronic Communications of the EASST Volume 25 (2010)



Proceedings of the Workshop Visual Formalisms for Patterns at VL/HCC 2009

Preface

Paolo Bottoni, Esther Guerra and Juan de Lara 2 pages

Guest Editors: Paolo Bottoni, Esther Guerra, Juan de Lara Managing Editors: Tiziana Margaria, Julia Padberg, Gabriele Taentzer

ECEASST Home Page: http://www.easst.org/eceasst/



Preface

This proceedings contains selected and extended papers presented at VFfP'09, the first International Workshop on Visual Formalisms for Patterns. The workshop was held as a satellite event of the 2009 IEEE Symposium on Visual Languages and Human-Centric Computing, VL/HCC 2009. The workshop brought together researchers interested in the definition, usage and analysis of patterns through visual formalisms, which couple the simplicity of traditional methods for pattern expression with solid foundations for pattern-based activities.

Patterns are used in different disciplines as a way to record expert knowledge for problem solving in specific areas. In Software Engineering, they are increasingly used for the definition of software applications and frameworks, as well as in Model-Driven Engineering, to indicate parts of required architectures, drive code refactorings, or build model-to-model transformations. Their systematic use promotes quality, standardization, reusability and maintainability of software artefacts. The full realisation of their power is however hindered by the lack of a standard formalization of the notion of pattern. Presentations of patterns are typically given through natural language to explain their motivation, context and consequences; programming code to show usages of the pattern; and diagrams to communicate their structure and behaviour.

Several researchers have indicated the limitations of the current semi-formal devices for pattern definition – generally based on domain modelling languages, such as UML for design patterns, or Coloured Petri Nets for workflow – and research is active to propose rigorous formalisms, methodologies and languages for pattern definition in specific domains, as well as to propose general models of patterns.

The availability of formalisms will make common practices involving patterns, such as pattern discovery, pattern enforcement, pattern-based refactoring, etc., simpler and amenable to automation, and open new perspectives for pattern composition and analysis of pattern consequences. This workshop was conceived as a forum to communicate, discuss and advance in these directions.

The VFfP'09 technical programme included the keynote presentation "Pinning Down Patterns" by Prof. John Hosking, Director of the Centre for Software Innovation of The University of Auckland (New Zealand). The workshop technical contributions were carefully reviewed by three referees, and the program committee selected 6 long and 3 short papers. The workshop was organized in in three technical sessions ("Pattern Definition and Formalization", "Patterns in Process and Test Engineering" and "Patterns and Visualization") and finished with a discussion panel on the benefits, limits and uses of pattern formalization. For these final proceedings, the papers were extended and revised according to the feedback obtained in the workshop, an additional round of revisions was organized and a total of 8 papers were finally accepted.

We would like to thank the members of the Program Committee and the secondary reviewers for their excellent work, they are listed below. We would also like to thank the organizing committee of VL/HCC'09 for their constant support, and to all workshop participants, which helped to make the first edition of VFfP a success!.

February 2010. Paolo Bottoni, Esther Guerra, Juan de Lara. PC chairs of VFfP'09.

1 / 2 Volume 25 (2010)



Program Committee

- Jing Dong, University of Texas, Dallas.
- Amnon H. Eden, University of Essex.
- Gregor Engels, University of Paderborn.
- Reiko Heckel, University of Leicester.
- John Hosking, University of Auckland.
- Dae-Kyoo Kim, Oakland University.
- Soon-Kyeong Kim, University of Queensland.
- Susana Montero, Universidad Carlos III de Madrid.
- Francesco Parisi Presicce, University of Rome, "Sapienza".
- Claudia Pons, University of La Plata.
- Nick Russell, Technical University of Eindhoven.
- Michael Stal, Siemens AG.
- David Stotts, University of North Carolina.
- Gerson Sunyé, Université de Nantes.
- Toufik Taibi, University of Western Ontario.
- Kang Zhang, University of Texas, Dallas.
- Albert Zundorf, University of Kassel.

External Reviewers

Nina Aschenbrenner, Christian Gerth, Jun Kong, Christian Soltenborn, Yajing Zhao.

Proc. VFfP 2009 2 / 2