State-of-the-Art Survey

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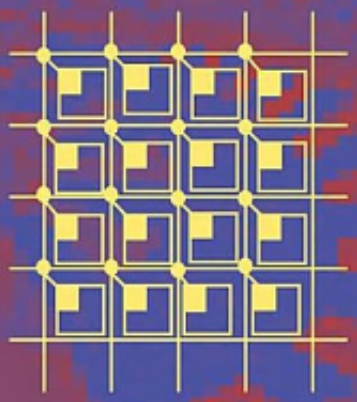
Bernhard K. Aichernig
Frank S. de Boer
Marcello M. Bonsangue (Eds.)

Formal Methods for Components and Objects

9th International Symposium, FMCO 2010
Graz, Austria, November/December 2010
Revised Papers



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Revised Papers

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Preface

Large and complex software systems provide the necessary
industries today. In order to construct such large systems in
the focus in development methodologies has switched in the
functional issues to structural issues: both data and functi
into software units which are integrated into large systems
techniques supporting reusability and modifiability. This en
is essential to both the object-oriented and the more rece
software engineering paradigms.

Formal methods have been applied successfully to the ve
sized programs in protocol and hardware design. However,
the development of large systems requires more emphasis o
eling and validation techniques supporting the concepts of
ifiability, and their implementation in new extensions of e
languages like Java.

The 9th Symposium on Formal Methods for Components
2010) was held in Graz, Austria, from November 29 to De
venue was Hotel Weitzer. FMCO 2010 was realized as a
of European projects focussing on formal methods for com
This volume contains 20 revised papers submitted after th
speakers of each of the following European projects involve
of the program:

- The FP7-IST project AVANTSSAR on automated va
  security of service-oriented architectures. The contact p
  (University of Verona, Italy).
- The FP7-IST project DEPLOY on industrial deploymen
  engineering methods for high productivity and depend
  person is Alexander Romanovsky (Newcastle Universit

- The FP7-IST project MOGENTES on model-based ge
  dependable embedded systems. The contact person
  FMCO is Bernhard Aichernig (Graz University of Tech
- The FP7-IST project MULTIFORM on integrated mult
  port for the design of networked embedded control s
  person for work relating to FMCO is Christian Sonn
  Germany).
- The FP7-IST project QUASIMODO on quantitative
  model-driven design of embedded systems. The conta
  Larsen (Aalborg University, Denmark).

The proceedings of the previous editions of FMCO have be
umes 2852, 3188, 3657, 4111, 4709, 5382, 5751, and 6286
Notes in Computer Science. We believe that these proceedi
combination of ideas on software engineering and formal m
the expanding body of knowledge on modern software syst

Finally, we thank all authors for the high quality of the
the reviewers for their help in improving the papers for thi

July 2011 Be

Organization

FMCO 2010 was organized by the Institute for Software Te
versity of Technology, Austria, in collaboration with the Cen
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puter Science, Leiden University, The Netherlands.

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