

SFEDL 2002

Semantic Foundations of Engineering Design Languages

Satellite Workshop to the Fifth European Joint Conferences on Theory and Practice of Software (ETAPS 2002) Grenoble, France, April 14, 2002

Proceedings

Note: All authors of the papers included in these proceedings will be invited to submit revised, extended versions for a special issue of Springer Verlag's Formal Aspects of Computing journal on the topic of the workshop. These will pass through a second round of peer-reviewing and are expected to be published in 2003.

Preface

This report contains the proceedings of the First International Workshop on Semantic Foundations of Engineering Design Languages (SFEDL). Engineering design languages are at the heart of today's tools employed for developing embedded systems. Their thorough semantic underpinning is a necessity to make them scale up with the ever increasing complexity of real-world systems and to interface them to state-of-the-art techniques for simulation, validation, and code generation. Recent years have seen growing interest in this field, with academic and industrial experts in concurrency theory, tool development, and formal validation techniques joining forces. The aim of the workshop is to provide an opportunity for this community to present novel and ongoing research, to demonstrate tools, and to discuss emerging ideas.

The workshop took place on April 14, 2002 as a satellite event to the Fifth European Joint Conferences on Theory and Practice of Software (ETAPS 2002) and was hosted by VERIMAG in Grenoble, France. We received paper submissions from 10 countries on 3 continents, of which 58% were accepted for presentation. The submitted papers were evaluated by an international program committee with the following members:

- F. Balarin (Cadence, USA)
- M. Broy (Technical University of Munich, D)
- R. Cleaveland (State University of New York at Stony Brook, USA)
- P.-W. DeRoever (University of Kiel, D)
- H. Dörr (Daimler-Chrysler, D)
- A. Evans (University of York, UK)
- A. Kerbrat (Telelogic, FR)
- S. Leue (University of Freiburg, D)
- G. Lüttgen (University of Sheffield, UK)
- F. Maraninchi (VERIMAG, FR)
- M. Mendler (University of Sheffield, UK)
- M. Morley (Verisity, USA)

The meeting of the program committee took place electronically in December 2001. In addition to the submitted contributions, there were demonstrations of 4 design and validation tools at the workshop: Ptolemy II, Esterel Studio, AutoFocus and Validas Validator, and Reactis Tester.

We would like to express our gratitude to all authors of submitted papers, to the tool demonstrators, to the members of the program committee and to the referees assisting them. We greatly appreciate the efforts of the ETAPS organizing committee in Grenoble, especially S. Graf (general chair) and R. Echahed (workshop chair).

February 2002

Gerald Lüttgen, Florence Maraninchi, and Michael Mendler (SFEDL Workshop Organizers)