Editorial

We are pleased to present the special issue of papers revised from the 10th International Conference on Software Engineering and Formal Methods (SEFM), held in Thessaloniki, Greece, in October 2012. The proceedings were originally published as Volume 7504 in Springer Lecture Notes in Computer Science, edited by George Eleftherakis, Mike Hinchey and Mike Holcombe.

The Program Committee of SEFM 2012 received 98 full submissions, each paper was reviewed by at least three reviewers, and finally selected 19 research papers for inclusion in the proceedings.

After the conference, presenters of the papers with the best reviews were invited to submit significantly extended papers for inclusion in this special issue. These were re-reviewed by a new set of reviewers and a final selection of five accepted papers was made for this collection.

Balancing Expressiveness in Formal Approaches to Concurrency by Cliff B. Jones, Ian J. Hayes, and Robert J. Colvin questions the view that specifying and reasoning about concurrent programs would be easier with more expressive languages and presents the issues that appear to be inescapable with concurrency and examines ways in which these fundamental challenges can be met.

Language and Tool Support for Event Refinement Structures in Event-B by Asieh Salehi Fathabadi, Michael Butler and Abdolbaghi Rezazadeh systematically defines Event Refinement Structures that augment Event-B with a graphical notation, the tool that supports it, and evaluates the contribution of both.

Strategy Based Semantics for Mobility with Time and Access Permissions by Gabriel Ciobanu, Maciej Koutny and Jason Steggles presents new semantic models for Timed Mobility and Permissions, Timers and Mobility process algebras with the aim of providing a basis for tool support and a formal framework for investigating the different semantic options available.

Compositional Reasoning about Active Objects with Shared Futures by Crystal Chang Din and Olaf Owe presents a model for asynchronously communicating objects, where return values from method calls are handled by futures.

Frama-C—A Software Analysis Perspective by Pascal Cuoq, Florent Kirchner, Nikolai Kosmatov, Virgile Prevosto, Julien Signoles, and Boris Yakobowski introduces a source code analysis platform that aims at conducting verification of industrial-size C programs.

We are grateful to Formal Aspects of Computing for enabling the publication of this set of papers; to the participants and reviewers of the conference, and the reviewers of the special issue for their very detailed comments on the papers. A special thank you to John Cooke and Jim Woodcock for their constant support during the production of this issue.

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