Preface

The First Workshop on Automated Formal Methods was held on Aug 21, 2006 as part of FLoC 2006 in Seattle, Washington. The workshop focused on the suite of tools consisting of the PVS specification/verification environment, the SAL (Symbolic Analysis Laboratory) framework for analyzing transition systems, and the Yices solver for satisfiability modulo theories. The workshop included the following tutorials

- John Rushby: Overview of PVS, ICS, and SAL, and plans for the future
- Sam Owre: Recent PVS Language Developments
- N. Shankar: Recent PVS Prover Developments
- Leonardo de Moura: Overview of Yices
- John Rushby: Overview of SAL: Model checking and Test Generation
- Bruno Dutertre: Model Checking Infinite-State Systems

Joseph Kiniry (School of Computer Science and Informatics, University College Dublin, Dublin, Ireland) presented an invited talk entitled (*Deeply*) Integrating Programming and Proving.

There were five contributed papers.

- Cesar Munoz: Batch Proving and Proof Scripting in PVS
- Chris George and Anne E. Haxthausen: Specification and Proof of the Mondex Electronic Purse
- Borzoo Bonakdarpour and Sandeep S. Kulkarni: Mechanical Verification of Automated Synthesis of Multitolerance
- Paul Nicholas Loewenstein, Shailender Chaudhry, Robert Cypher and Chaiyasit Manovit: Multiprocessor Memory Model Verification
- Sam Owre: Random Testing in PVS

We hope this workshop is a useful first step towards greater communication and cooperation between the developers and users of automated formal verification tools.

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