Third International Workshop on Verification and Evaluation of Computer and Communication Systems (VECoS 2009)

Rabat, Morocco

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Editors:

B. Monsuez

Said El Hajji

Abstract

The aim of VECoS workshop is to bring together researchers and practitioners in the areas of verification, control, performance, quality of service, dependability evaluation and assessment, to discuss the state of the art for solving the challenges facing us today in various modern computer and communication systems in which functional and extra-functional properties are strongly interrelated.

Thus, the main motivation for VECoS is to encourage the cross-fertilization between formal verification and evaluation approaches, methods and techniques especially those based on the specification formalisms for concurrent, distributed and soft/hard systems. Beyond its technical and scientific goals, another main purpose of VECoS is to promote collaboration between participants in research and education in the area of computer science and engineering.

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Full Synopsis

The International Workshop on Verification and Evaluation of Computer and Communication Systems (VECoS) is one of the leading forums for the presentation of all aspects of verification, performance modeling and analysis of computer and communication systems.

VECoS offers a unique forum for researchers and practitioners from academia to share their expertise results and achievements in all areas of verification and performance evaluation of computer and communication systems including analytic modeling, simulation and measurements.

The first edition was held in Algiers, Algeria (2007), the second edition was held in Leeds, Great Britain (2008). This year's edition is held in Rabat, Morocco.

This year's programme consists of four regular paper sessions and four invited talks. Various topics are covered in the programme and include Petri nets, model checking, formal verification, embedded systems and wireless networks.

These proceedings record the contributions from the technical sessions. We present thirteen technical papers selected out from twenty-four submissions.

We have been delighted by the overwhelming response from the international community of computer and communication systems to our call for papers. The workshop attracted a large number of high quality papers from many countries. Once again we welcome back our colleagues from Tunisia, Morocco, Algeria, France, Germany, Italy, Canada, and the United Kingdom.

The programme committee includes researchers from forty-three laboratories. Each paper submitted was evaluated by at least three reviewers. After the evaluation, reports were returned to the programme committee for discussion and resolution of conflicts. Based on their recommendations, we implemented a consensus process, and selected the thirteen papers that we present here.

We are grateful to all members of the programme committee, the organising committee and to all referees for their hard work. The support and encouragement of the steering committee were invaluable assets. Without the support of our institutions, VECoS2009 could not have been a reality. Their recognition of the importance of this event is greatly appreciated. Finally, we would like to thank all the authors of the invited and submitted papers, and all participants at the Workshop. They are the main focus of VECoS.

We would also like to thank the University of Mohammed V-Agdal for hosting the event.

Bruno Monsuez and Said El Hajji

VECoS'2009 Co-Chairs

Rabat, July 2008

Editors

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Papers:

Session 1: Wireless Networks

Sabrina Abid and Pr. Hafid Haffaf Optimal Sensors Placement for Failures Detection and Isolation
<http://dx.doi.org/10.14236/ewic/VECOS2009.1>

Said El Hajji and Ghizlane Orhanou Confidentiality in the UMTS Radio Access Network Simulation approach under OPNET <http://dx.doi.org/10.14236/ewic/VECOS2009.2>

Fouzi Semchedine, Louiza Bouallouche-Medjkoune, Sofiane Moad, Rafik Makhoulfi and Djamil Aïssani
Discrete Events Simulator for wireless sensor networks
<http://dx.doi.org/10.14236/ewic/VECOS2009.3>

Jun Chen, Karim Djouani and Kamel Barkaoui Orthogonal and Non-orthogonal Cooperative protocols in WLANs <http://dx.doi.org/10.14236/ewic/VECOS2009.4>

Session 2: Timed Systems & Model Checking

Florent Peres, Pierre-Emmanuel Hladik and François Vernadat Specification and Verification of Real-Time Systems using the POLA tool <http://dx.doi.org/10.14236/ewic/VECOS2009.5>

M.C. Boukala and L. Petrucci Distributed CTL Model-Checking and counterexample search
<http://dx.doi.org/10.14236/ewic/VECOS2009.6>

Nesrine Harrath and Bruno Monsuez Timed SystemC Waiting-State Automata
<http://dx.doi.org/10.14236/ewic/VECOS2009.7>

Session 3: Control & Dependability

Martin Oberkönig, Martin Schickel and Hans Eveking Improving Testbench Evaluation using Normalized Formal Properties <http://dx.doi.org/10.14236/ewic/VECOS2009.8>

O. Malassé, G. Buchheit, K. Hamidi, M. Pock, H. Belhadaoui, M. Walter and J.F. Aubry Dependability Evaluation of Complex Embedded Systems and Microsystems
<http://dx.doi.org/10.14236/ewic/VECOS2009.9>

Abbas Dideban and Hassane Alla Controller Synthesis by Petri Nets Modelling
<http://dx.doi.org/10.14236/ewic/VECOS2009.10>

Session 4: Model & System Design

Ahmed Mekki, Mohammed Ghazel and Armand Toguyeni Validating time-constrained systems
using UML Statecharts Patterns and Timed Automata Observers
<http://dx.doi.org/10.14236/ewic/VECOS2009.11>

Linda Mohand Oussaïd, Yasmine Aït Ameer and Mohammed Ahmed Nacer A generic formal model
for fission of modalities in output multi-modal interactive systems
<http://dx.doi.org/10.14236/ewic/VECOS2009.12>