Second International Workshop on Verification and Evaluation of Computer and Communication Systems (VECoS 2008)

Leeds, UK

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Editors:

Rahma Ben Ayed

Karim Djemame

Abstract

The aim of the workshop is to bring together researchers and practitioners, in the areas of verification, control, performance, Quality of Service and 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 non functional properties are strongly mixed.

Thus, the main motivation for VECoS is to encourage the cross-fertilisation between verification and evaluation approaches, methods and techniques especially those based on the specification formalisms for concurrent systems (i.e. process algebras, transition systems, automata networks, Petri nets, rewrite logic... etc).

This conference is sponsored by:

Full Synopsis

The International Workshop on Verification and Evaluation of Computer and Communication Systems (VECoS) continues its mission as one of the leading forum for the presentation of all aspects of verification, performance modelling and analysis of computer and communication systems. The first edition was held in Algiers, Algeria (2007). This year's edition is held in Leeds, United Kingdom.

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 modelling, simulation and measurements.

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

These proceedings record the contributions from the invited speakers and from the technical sessions. We present four invited papers, nineteen technical papers, selected out of submissions from sixteen laboratories.

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, Italy, Canada, and the United Kingdom.

The programme committee includes researchers from forty 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 nineteen 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, VECoS2008 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 School of Computing at the University of Leeds for hosting the event.

Rahma Ben Ayed and Karim Djemame

VECoS'2008 Co-Chairs

Leeds, July 2008

Editors

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Papers:

Session 1: Verification Methods

Djamel Eddine Saïdouni, Nabil Belala and Messaouda Bouneb Aggregation of transitions in marking graph generation based on maximality semantics for Petri nets

<http://dx.doi.org/10.14236/ewic/VECOS2008.1>

Sa'ed Abed, Otmane Ait Mohamed and Ghiath Al Sammane Multiway Decision Graphs Reduction Approach based on the HOL Theorem Prover

<http://dx.doi.org/10.14236/ewic/VECOS2008.2>

Jean-Michel Couvreur and Duy-Tung Nguyen Tree Data Decision Diagrams

<http://dx.doi.org/10.14236/ewic/VECOS2008.3>

Harry Gros-Desormeaux, Hacène Fouchal and Philippe Hunel A Comparison of Distributed Test Generation Techniques

<http://dx.doi.org/10.14236/ewic/VECOS2008.4>

Session 2: Network Optimisation

Abdelfettah Belghith and Wafa Akkari Power Saving Mechanisms for Ad hoc networks Based on Handshaking Information Tapping

<http://dx.doi.org/10.14236/ewic/VECOS2008.5>

Bouabdellah Kechar, Ahmed Louazani, Larbi Sekhri, Mohamed Faycal Khelfi Energy Efficient Cross-Layer MAC Protocol for Wireless Sensor Networks

<http://dx.doi.org/10.14236/ewic/VECOS2008.6>

Naouel Ben Ali, Miklos Molnar and Abdelfettah Belghith ICRA: Incremental Cycle Reduction Algorithm for optimizing multi-constrained multicast routing

<http://dx.doi.org/10.14236/ewic/VECOS2008.7>

Session 3: Network Evaluation

Ali El Kamel and Habib Youssef REEQOS: An RSVP-TE approach for the End-to-End QoS provisioning within MPLS Domains

<http://dx.doi.org/10.14236/ewic/VECOS2008.8>

Anis Ben Arbia and Habib Youssef Adaptive Clustering Based on Auto - Learning Algorithm

<http://dx.doi.org/10.14236/ewic/VECOS2008.9>

Session 4: Complex Systems Analysis and Verification

Nicolas Ayache, Loïc Correnson and Franck Védrine Verifying SystemC with Scenario
<http://dx.doi.org/10.14236/ewic/VECOS2008.10>

Gabriella Carrozza, Marcello Cinque, Domenico Cotroneo and Roberto Natella Operating System Support to Detect Application Hangs
<http://dx.doi.org/10.14236/ewic/VECOS2008.11>

Bilel Benhamamouch, Bruno Monsuez and Franck Védrine Computing WCET using symbolic execution
<http://dx.doi.org/10.14236/ewic/VECOS2008.12>

Session 5: Verification/Evaluation of Distributed Systems

Yassine Elghayam, Mohammed Ouzzif and Mohammed Erradi An LTL Specification and Verification of a Mobile Teleconferencing System
<http://dx.doi.org/10.14236/ewic/VECOS2008.13>

Ahmed Hammad and Hassan Mountassir Heuristics to Verify LTL Properties of Hierarchical Systems
<http://dx.doi.org/10.14236/ewic/VECOS2008.14>

Boussad Addad and Said Amari Response time evaluation in Ethernet-based automation architectures
<http://dx.doi.org/10.14236/ewic/VECOS2008.15>

Session 6: Distributed Information Systems Modelling

Shehla Abbas, Mohamed Mosbah and Akka Zemhari A Probabilistic Model for Distributed Merging of Mobile Agents
<http://dx.doi.org/10.14236/ewic/VECOS2008.16>

Siwar Khelifi, Hatem Hadj kacem and Ahmed Hadj Kacem Specification and verification of the structural and behavioral properties of Publish/Subscribe architectures
<http://dx.doi.org/10.14236/ewic/VECOS2008.17>

Lu Liu, Duncan Russell, Nik Looker, David Webster and Jie Xu Evolutionary Service-Oriented

Architecture for Network Enabled Capability

<http://dx.doi.org/10.14236/ewic/VECOS2008.18>