Message from the Program Committee Co-chairs

We are very pleased to welcome all of you to the sixth edition of the International Conference on Quantitative Evaluation of SysTems, QEST 2009 at Budapest, Hungary. QEST was first held in Enschede, The Netherlands in 2004, followed by subsequent meetings in Torino, Italy in 2005, Riverside, USA in 2006, Edinburgh, United Kingdom in 2007, and last year in St. Malo, France.

The International Conference on Quantitative Evaluation of SysTems (QEST) is a leading forum on evaluation and verification of computer systems and networks, through stochastic models and measurements. QEST has a broad range of interest and the common thread is that the evaluation be quantitative. The range of performance metrics of interest spans classical measures involving performance and reliability, as well as quantification of properties that are classically qualitative, such as safety, correctness, and security. QEST welcomes measurement-based studies as well as analytic studies. QEST welcomes diversity in the model formalisms and methodologies employed, as well as development of new formalisms and methodologies such as quantitative planning for infrastructures. QEST is keenly interested in case studies that highlight the role of quantitative evaluation in the design of "systems", where the notion of system is broad. Systems of interest include computer hardware and software architectures, communication systems, embedded systems and biological systems. Moreover, tools for supporting the practical application of research results in all of the above areas are of special interest, and therefore tool papers are sought. In short, QEST aims to create a sound methodological basis for assessing and designing systems using quantitative means.

QEST 2009 considered five types of papers (in no particular order):

- Theoretical papers, which advance our understanding, apply to non-trivial problems and are mathematically rigorous.
- Methodological and technical papers, which describe situations that require the development and proposal of new analysis processes and techniques.
- Application papers, which describe a non-trivial application, and provide a comparison with previous results, if previously analyzed.
- Tools papers, which should motivate the development of the new tools and the formalisms they support.
- Tool demonstration papers, which are 2-page papers that describe a relevant tool, as well as its features, evaluation, or any other information that may demonstrate the merits of the tool.

The QEST 2009 Program Committee consisted of 39 members. Each paper was assigned to four PC Members who were responsible for reviewing the papers, either themselves or, occasionally, using expert sub-reviewers. The reviews were submitted electronically and there was an electronic discussion phase that lasted about two weeks during which discussions of papers were held. As PC Chairs, we tracked all discussions and paid particular attention to papers with widely differing reviews. The selection process culminated with the physical 2-day PC meeting held in London, United Kingdom. Twenty-one of the PC Members came to this physical meeting where the final decisions were made. Naturally, several hard decisions had to be taken and in the end many good papers could not be accepted. We hope that the authors of all papers will find the reviews helpful.

In the end, 26 of 59 full papers and 10 of 13 tool demonstration papers were selected. We are delighted to report that we had two distinguished invited speakers:

- Jan Beutel (ETH Zuerich, Switzerland) on research challenges in wireless sensor networks
- Lucy Cherkasova (Hewlett-Packard Laboratories, USA) who gave a talk entitled "Towards Automated Capacity Planning and Anomaly Detection for Enterprise Applications" where the first speaker was jointly invited with FORMATS 2009.
In addition we had five tutorials for the Sunday before the start of the QEST 2009 conference. The tutorials, like the scientific conference program, reflect the diversity and spirit of the QEST community.

The tutorials were

- Simulation + Hypothesis Testing for Model Checking Probabilistic Systems, given by Axel Legay, IRISA/INRIA Rennes, France and Mahesh Viswanathan, University of Illinois at Urbana-Champaign, USA
- Infinite-State Verification: From Transition Systems to Markov Chains, given by Parosh Aziz Abdulla, Uppsala University
- Analyzing Large Sparse Markov Chains of Kronecker Products, given by Tugrul Dayar, Department of Computer Engineering, Bilkent University
- An Introduction to Monte Carlo Methods and Rare Event Simulation, given by Gerardo Rubino and Bruno Tuffin, IRISA/INRIA Rennes, France
- Petri net analysis using decision diagrams, given by Gianfranco Ciardo, Department of Computer Science and Engineering, University of California at Riverside

We thank all of you who submitted papers to QEST 2009; without you there simply would be no conference. We would like to thank the program committee members and their sub-reviewers for their hard work and for sharing their valued expertise with the rest of the community. They did an outstanding job with dedication to fairness. We especially thank the Department of Computing at Imperial College for having hosted the physical PC meeting, and those PC members who traveled to this meeting at their own expense. We thank the general chair, Miklos Telek, for organizing this conference in Budapest and for having taken care of the multitude of details required for setting up such an event. We also thank the Tools Chair, Marco Gribaudo, who in conjunction with the PC members was responsible for the selection of the tool demonstration papers. We thank the tutorial chair, András Horváth, the local organization chair, Levente Bodrog, and the publicity chair Armin Heindl for their crucial roles in making this conference possible and successful. Finally, we would like to thank Boudewijn Haverkort, chair of the QEST Steering Committee, as well as the entire QEST Steering Committee for their guidance, leadership, and advice.

We very hope that you will find this conference to be rewarding and that you consider submitting papers to QEST 2010.

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