QEST'07

Quantitative **E**valuation of **S**ys**T**ems '07

4th International Conference on Quantitative Evaluation of SysTems
September 16th-19th, 2007, University of Edinburgh, Scotland, UK

SCOPE & TOPICS

The International Conference on Quantitative Evaluation of SysTems (**QEST**) is the leading forum on evaluation and verification of computer systems and networks, through stochastic models and measurements. QEST combines four former events: **PNPM** (Workshop on Petri Nets and Performance Models), **PAPM** (Workshop on Process Algebra and Performance Modelling), **PROBMIV** (Workshop on Probabilistic Methods in Verification) and **TOOLS** (Conference on Modelling Techniques and Tools for Computer Performance Evaluation).

Performance metrics of interest include response time, reliability, availability, safety, security, survivability, correctness, timeliness, and efficiency. Areas of interest include modelling formalisms and methodologies, measurements, analytical and numerical evaluation, simulation and verification, and theory of probabilistic, concurrent and non-deterministic behaviour. Also of interest are case studies showing the role of quantitative evaluation in the design of systems including computer architectures, distributed and fault tolerant systems, communication systems, embedded systems, web-based systems, and safety-critical systems. Moreover, tools for supporting the practical application of research results in all the above areas are of special interest for QEST and therefore tool papers are sought. In short, QEST aims to create a sound methodological basis for assessing and designing trustworthy computing systems and networks.

Example topics of interest include: schedulability analysis; verification of probabilistic systems; concurrency theory for probabilistic systems; analysis of randomized algorithms; model-checking algorithms; optimization techniques; probabilistic decision-making and planning; hybrid and hierarchical modelling and evaluation techniques; stochastic and timed Petri nets; stochastic and timed process algebras; stochastic and timed automata; queueing networks; Markov chains; non-Markovian models and algorithms; numerical and analytical solution techniques; efficient simulation techniques; formal specification techniques; quantitative extensions of UML; measurement and benchmarking.

SUBMISSIONS

We invite submissions of original papers, in English, related to the topics of the conference and formatted in the IEEE double-column format. Electronic submission instructions may be found at www.qest.org. Submitted papers should not exceed 10 pages. Additional material for the aid of the reviewers (e.g., proofs) can be presented in a clearly-marked appendix. Papers must be unpublished and must not be submitted for publication elsewhere. All papers will be thoroughly reviewed by at least 3 referees on the basis of originality and scientific and practical contributions to the state of the art. Accepted papers will appear in the Conference Proceedings, published by IEEE Computer Society Press, and must be presented at the conference by one of the authors. A best-paper award will be presented at the conference. Selected papers will appear in a special issue of IEEE Transactions on Software Engineering.

TOOL PRESENTATIONS

Sessions will be arranged to present and demonstrate tools relevant to any conference topic. Tool submissions (2 pages, IEEE double-column format) should be sent to the Tools Chair. Accepted tool descriptions will appear in the conference proceedings.

TUTORIALS

There will be one day of tutorials at the start of the conference. Tutorial proposals (up to 4 pages) should be sent to the Tutorial Chair.

IMPORTANT DATES

Abstract submission: 17th March
Paper submission: 24th March
Tools & tutorials: 15th May
Author notification: 7th June
Camera ready version: 2nd July

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