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Titolo	Formal Methods and Stochastic Models for Performance Evaluation [[electronic resource] ] : Third European Performance Engineering Workshop, EPEW 2006, Budapest, Hungary, June 21-22, 2006, Proceedings / / edited by András Horváth, Miklós Telek
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Descrizione fisica	1 online resource (VIII, 239 p.)
Collana	Programming and Software Engineering ; ; 4054
Disciplina	004.2/4
Soggetti	Computers Software engineering Computer system failures Computer communication systems Computer logic Theory of Computation Software Engineering System Performance and Evaluation Computer Communication Networks Logics and Meanings of Programs
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Stochastic Process Algebra -- A Precedence PEPA Model for Performance and Reliability Analysis -- A Function-Equivalent Components Based Simplification Technique for PEPA Models -- Functional Performance Specification with Stochastic Probes -- Embedding Real Time in Stochastic Process Algebras -- Workloads and Benchmarks -- Precise Regression Benchmarking with Random Effects: Improving Mono Benchmark Results -- Working Set Characterization of Applications with an Efficient LRU Algorithm -- Theory of Stochastic Processes -- Model Checking for a Class of Performance Properties of Fluid Stochastic Models -- Explicit Inverse Characterizations of Acyclic MAPs of Second Order -- Implementation Relations for Stochastic Finite

State Machines -- On the Convergence Rate of Quasi Lumpable Markov Chains -- Formal Dependability and Performance Evaluation -- Applying the UML Class Diagram in the Performance Analysis -- Dependability Evaluation of Web Service-Based Processes -- Queues, Theory and Practice -- Improving the Performance of IEEE 802.11e with an Advanced Scheduling Heuristic -- Worst Case Analysis of Batch Arrivals with the Increasing Convex Ordering -- The Impact of Buffer Finiteness on the Loss Rate in a Priority Queueing System -- Experimental Analysis of the Correlation of HTTP GET Invocations.

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## Sommario/riassunto

The idea to establish a European forum for academic and industrial researchers working on various aspects of performance modeling and analysis of manufacturing and information systems gave rise to an annual series of workshops, referred to as European Performance Engineering Workshop (EPEW). The first two EPEW workshops were held in Toledo, Spain, October 1-2, 2004, and Versailles, France, September 1-3, 2005. This volume contains the proceedings of the third EPEW workshop held at the Technical University of Budapest, Budapest, Hungary, June 21-22, 2006. These proceedings comprise the 16 accepted contributed papers of EPEW 2006. To ensure the high-quality evaluation of the submitted papers we extended the Program Committee of EPEW 2006 with international experts from all over the world. Each submitted paper went through a rigorous review by at least three international reviewers. Based on the reviews, the subsequent discussions of reviewers with different judgement and an Internet-based Program Committee meeting held on March 30, 2006, we selected 40% of the submitted papers. We therefore owe special thanks to all members of the Program Committee and to all external referees for the excellent work they did for the proper evaluation of the papers. The final workshop program, as well as this volume, are made up of five thematic sessions: – Stochastic process algebra – Workloads and benchmarks – Theory of stochastic processes – Formal dependability and performance evaluation – Queues, theory and practice. These sessions cover a wide range of performance evaluation methods and also pose an overview of the current research directions in performance evaluation.

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