1. Record Nr. UNINA9910483375103321

Titolo Formal methods and stochastic models for performance evaluation :

Third European Performance Engineering Workshop, EPEW 2006,

Budapest, Hungary, June 21-22, 2006 : proceedings / / Andras

Horvath, Miklos Telek (eds.)

Pubbl/distr/stampa Berlin; New York, : Springer, c2006

ISBN 3-540-35365-8

Edizione [1st ed. 2006.]

Descrizione fisica 1 online resource (VIII, 239 p.)

Collana Lecture notes in computer science, , 0302-9743;; 4054

LNCS sublibrary. SL 2, Programming and software engineering

Altri autori (Persone) HorvathAndras

TelekMiklos

Disciplina 004.2/4

Soggetti Formal methods (Computer science)

Stochastic models

Computer systems - Evaluation

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

Sommario/riassunto

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.

The idea to establish a European forum for academic and industrial researchers working on various aspects of performance modeling and analysis of manuf- toring and information systems gave rise to an annual series of workshops, - ferred to as European Performance Engineering Workshop (EPEW). The ?rst two EPEW workshops were held in Toledo, Spain, October 1-2, 2004, and V- sailles, 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 highqualityevaluationofthesubmittedpapersweextended the ProgramCommittee of EPEW 2006with international experts from all over the world. Each submitted papers went through a rigorous review by at least three international reviewers. Based on the reviews, the subsequent discussions ofreviewerswithdi? erentjudgementandanInternet-basedProgramCommittee 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 ?nal workshop program, as well as this volume, are made up of ?ve 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 c- pose an overview of the current research directions in performance evaluation.