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DESCRIPTION

Performance Evaluation is a leading journal in the area of modeling, measurement, and evaluation of performance aspects of computing and communication systems. As such, it aims to present a balanced and complete view of the entire field of performance evaluation. The journal audience encompasses academics, industrial researchers, and professional figures such as performance engineers, network managers, and computer system designers.

The journal solicits from its audience papers that focus on one or more of the following dimensions:
- Define new performance evaluation tools, including measurement and monitoring tools as well as modeling and analytic techniques
- Provide new insights into the performance of computing and communication systems
- Present novel control and learning methods for performance management
- Introduce new application areas where performance evaluation tools and methods can play an important role

Contributions to the journal often focus on theoretical, methodological, or applied aspects of:
- Resource allocation (e.g., routing and flow control, bandwidth allocation, load-balancing, deployment, ...) System tuning, sizing and optimal configuration System reliability and dependability Energy efficiency and energy harvesting
- System architecture design and implementation

Application areas of interest include, but are not limited to, the following:
- Computer and communication networks (e.g., software-defined, wireless, cognitive radio, ad-hoc, quantum, ...) Data centers Cloud, IoT, edge, and cyber-physical systems Social networks, social media, metaverse AI-based services Big data and storage systems Blockchain and distributed ledgers Autonomous and self-organizing systems

Commonly featured performance evaluation methods and techniques include:
- Stochastic models (e.g., queueing theory, mean-field models, stochastic geometry, ...) Data-driven methods (e.g., AI/ machine learning, inference, statistical analysis, ...) Scheduling and load balancing theory Simulation methods Game theory and pricing Measurement techniques (e.g., software and hardware monitors) and workload characterization

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AUDIENCE

System Designers, Implementors, Theoricians and Analysts concerned with performance aspects of computers, computer communications, telecommunications and distributed systems.

IMPACT FACTOR

2022: 2.200 © Clarivate Analytics Journal Citation Reports 2023

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CompuMath Citation Index
ISI Alerting Services
ACM Computing Reviews
Cambridge Scientific Abstracts
Engineering Index
INSPEC
Current Contents
Computer Literature Index
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GUIDE FOR AUTHORS

INTRODUCTION
Topics are drawn from, but are not restricted to, the following areas:

- Performance studies of computers, computer communications, telecommunications and distributed systems
- Resource allocation and control methods and algorithms (e.g. routing and flow control in networks, bandwidth allocation, processor scheduling, memory management)
- System reliability
- Modeling and analysis methods (e.g. queueing and scheduling theory, simulation methods, data analysis)
- Measurement techniques (e.g. software and hardware monitors) and workload characterization
- System architecture, design and implementation discussed from a performance viewpoint
- Performance evaluation applications (e.g. system tuning, procurement, capacity planning)
- Case studies and model validations

Types of Paper
The journal welcomes the following types of contributions:

- Original research articles
- Survey articles, providing a comprehensive review on a scientific topic
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