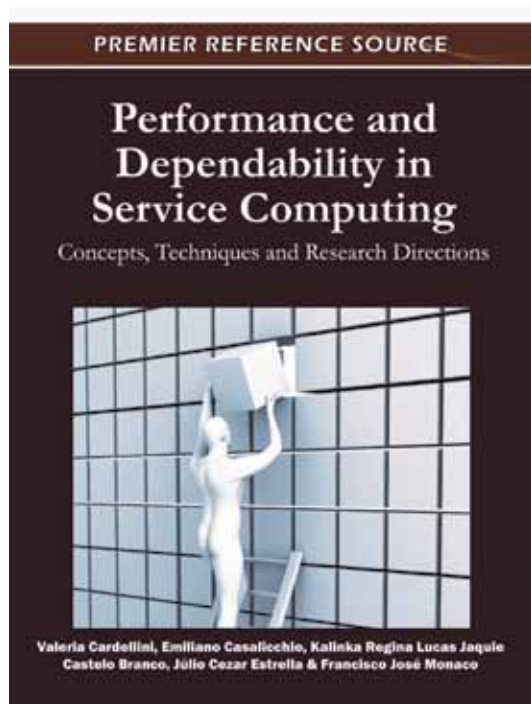


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Performance and Dependability in Service Computing: Concepts, Techniques and Research Directions



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When deployed as infrastructure components of real-time business processes, service computing applications we rely on for our daily activities elicit the proper addressing of performance and dependability issues. While recent developments in service-oriented architectures have come a long way in many aspects, ranging from semantics and ontologies to frameworks and design processes, performance and dependability remains a research demanding field.

Performance and Dependability in Service Computing: Concepts, Techniques and Research Directions highlights current technological trends and related research issues in dedicated chapters without restricting their scope. This book focuses on performance and dependability issues associated with service computing and these two complementary aspects, which include concerns of quality of service (QoS), real-time constraints, security, reliability and other important requirements when it comes to integrating services into real-world business processes and critical applications.

Topics Covered:

- Criticism of Current Models and Technologies
- Implementation and Deployment Technologies
- Integration of Dependability and Security Concepts
- QoS and SLA in Service-Oriented Computing
- Real-Time Issues in Service-Oriented Computing
- Real-World Experiences
- Security and Privacy Issues and Concerns
- Self-Adaptive Service-Oriented Architectures
- System and Service Dependability

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Valeria Cardellini is Assistant Professor in the Department of Computer Science, Systems and Production of the University of Roma "Tor Vergata", Italy. She received her PhD degree in computer science in 2001 and her Laurea degree in computer engineering in 1997, both from the University of Roma "Tor Vergata". She was a visiting researcher at IBM T.J. Watson Research Center in 1999. Her research interests are in the field of distributed computing systems, with special emphasis on large-scale systems and services based on Internet and the Web. On these subjects she has (co)authored more than 50 papers in international journals, book chapters, and conference proceedings. She has been co-chair of AAA-IDEA 2009, has served as a member of program and organizing committees of international conferences on Web and performance analysis areas, and serves as frequent reviewer for various wellknown international journals. She is a member of ACM and IEEE.



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