Foreword p. viii
Message from the General Chair p. ix
Conference Organization p. x
Challenges and Solutions for 24/7 System Availability p. 2
Everything You Wanted to Know about SRE but Didn't Know Who to Ask p. 3
Practical Issues in Implementing Software Reliability Measurement p. 3
Software Independent Verification and Validation (IVandV) Challenges p. 6
Tenth Anniversary Panel: A Look Back at the Ten Years of ISSRE p. 6
Software Reliability Techniques Models I p. 6
Confidence Interval Estimation of NHPP-Based Software Reliability Models p. 22
Rare Failure-State in a Markov Chain Model for Software Reliability p. 32
Enhancing the Predictive Performance of the Littlewood Non-Homogeneous Poisson Process Software Reliability Growth Model Using Data Censoring Techniques p. 42
Reliability and Safety p. 42
Scenario-Based Reliability analysis of Component-Based Software p. 52
Building a System Failure Rate Estimator by Identifying Component Failure Rates p. 62
Applying Adaptive Safety Analysis Techniques p. 62
OO Testing and Modeling p. 73
An Exception Handling Mechanism for Developing Dependable Object-Oriented Software Based on a Meta-Level Approach p. 73
Software Reliability Modeling and Cost Estimation Incorporating Testing-Effort and Efficiency p. 84
Testing Object-Oriented Programs--An Integrated Approach p. 94
Software Reliability Techniques Models II p. 104
A Measurement-Based Model for Estimation of Resource Exhaustion in Operational Software Systems p. 116
A Stochastic Model of Human Errors in Software Development: Impact of Repair Times p. 126
Exploring Cost and Reliability Tradeoffs in Architectural Alternatives Using a Genetic Algorithm p. 136
Quality p. 148
Classification Tree Models of Software Quality Over Multiple Releases p. 158
An Empirical Study of Experience-Based Software Defect Content Estimation Methods p. 158
Predicting Deviations in Software Quality by Using Relative Critical Value Deviation Metrics p. 175
Testing I p. 175
Using Simulation for Assessing the Real Impact of Test Coverage on Defect Coverage p. 175
Efficient Regression Testing of Multi-Panel Systems p. 186
An Approach to Testing COTS Software for Robustness to Operating System Exceptions and Errors p. 186