

CONTENTS

Preface	v
List of Contributors	vii
Part A Foundation of Stochastic Operations Research	1
A Probabilistic Proof of an Identity Related to the Stirling Number of the First Kind <i>M. Tamaki</i>	3
A Sequential Decision Problem based on the Rate Depending on a Markov Process <i>T. Nakai</i>	11
Search for 90/150 Cellular Automata Sequences with Maximum Minimum-Phase-Spacing <i>M. Fushimi, T. Furuta and A. Ito</i>	31
Difference and Similarity between MONANOVA and OLS in Conjoint Analysis <i>H. Kono, H. Ishii and S. Shiode</i>	41
Part B Stochastic Modeling	55
A Datum Search Game and an Experimental Verification for Its Theoretical Equilibrium <i>R. Hohzaki and Y. Ida</i>	57
An Optimal Wait Policy in Two Discrete Time Queueing Systems <i>J. Koyanagi, D. Nanba and H. Kawai</i>	69

Analysis of Finite Oscillating $GI^X/M(m)//N$ Queueing Systems	79
<i>F. Ferreira, A. Pacheco and H. Ribeiro</i>	
A Continuous-Time Seat Allocation Model with Up-Down Resets	99
<i>K. Sato and K. Sawaki</i>	
Part C Reliability and Maintenance	115
Simulation of Reliability, Availability and Maintenance Costs	117
<i>P. Hagmark and S. Virtanen</i>	
Stochastic Profit Models under Repair-Limit Replacement Program	139
<i>T. Dohi, N. Kaio and S. Osaki</i>	
Investigation of Equivalent Step-Stress Testing Plans	151
<i>E. A. Elsayed, Y. Zhu, H. Zhang and H. Liao</i>	
Optimal Policy for a Two-Unit System with Two Types of Inspections	171
<i>S. Mizutani and T. Nakagawa</i>	
Redundancy Optimization in Multi-Level System Using Metaheuristics	183
<i>I. H. Chung, W. Y. Yun and H. G. Kim</i>	
Optimal Censoring Policies for the Operation of a Damage System	201
<i>K. Ito and T. Nakagawa</i>	
Part D Dependable Computing	211
Optimal Sequential Checkpoint Intervals for Error Detection	213
<i>K. Naruse, T. Nakagawa and S. Maeji</i>	
Effective Algorithms to Estimate the Optimal Software Rejuvenation Schedule under Censoring	225
<i>K. Rinsaka and T. Dohi</i>	

Optimal Backup Interval of a Database System Using a Continuous Damage Model	243
<i>S. Nakamura, T. Nakagawa and H. Kondo</i>	
Operational Software Performance Evaluation based on the Number of Debuggings with Two Kinds of Restoration Scenario	253
<i>K. Tokuno and S. Yamada</i>	
Software Reliability Assessment with 2-Types Imperfect Debugging Activities	271
<i>S. Inoue and S. Yamada</i>	
Flexible Stochastic Differential Equation Modeling for Open-Source-Software Reliability Assessment	285
<i>Y. Tamura and S. Yamada</i>	