

## CONTENTS

Preface	v
List of Contributors	vii
<b>Part A Reliability</b>	<b>1</b>
Warranty Analysis: Estimation of the Degree of Imperfect Repair via a Bayesian Approach <i>S. Chukova, Y. Hayakawa and R. Arnold</i>	3
Design of Optimum Simple Step-Stress Accelerated Life Testing Plans <i>E. A. Elsayed and H. Zhang</i>	23
A BDD-Based Algorithm for Computing the K-Terminal Network Reliability <i>G. Hardy, C. Lucet and N. Limnios</i>	39
Reliability Evaluation of a Packet-Level FEC based on a Convolutional Code Considering Generator Matrix Density <i>T. Hino, M. Arai, S. Fukumoto and K. Iwasaki</i>	51
A Framework for Discrete Software Reliability Modeling with Program Size and Its Applications <i>S. Inoue and S. Yamada</i>	63

<b>Part B</b>	<b>Maintenance</b>	<b>79</b>
Discrete-Time Opportunistic Replacement Policies and Their Application		81
<i>T. Dohi, N. Kaio and S. Osaki</i>		
Reliability Consideration of Window Flow Control Scheme for a Communication System with Explicit Congestion Notification		101
<i>M. Kimura, M. Imaizumi and K. Yasui</i>		
Optimal Availability Models of a Phased Array Radar		115
<i>T. Nakagawa and K. Ito</i>		
Optimal Checking Time of Backup Operation for a Database System		131
<i>K. Naruse, S. Nakagawa and Y. Okuda</i>		
Estimating Age Replacement Policies from Small Sample Data		145
<i>K. Rinsaka and T. Dohi</i>		
<b>Part C</b>	<b>Finance</b>	<b>159</b>
Stock Repurchase Policy with Transaction Costs under Jump Risks		161
<i>H. Goko, M. Ohnishi and M. Tsujimura</i>		
The Pricing of Perpetual Game Put Options and Optimal Boundaries		175
<i>A. Suzuki and K. Sawaki</i>		
On the Valuation and Optimal Boundaries of Convertible Bonds with Call Notice Periods		189
<i>K. Yagi and K. Sawaki</i>		

<b>Part D Performance Evaluation</b>	<b>203</b>
An Efficient Approach to Analyze Finite Buffer Queues with Generalized Pareto Interarrival Times and Exponential Service	205
<i>F. Ferreira and A. Pacheco</i>	
An Optimal Policy to Minimize Delay Costs Due to Waiting Time in a Queue	225
<i>J. Koyanagi and H. Kawai</i>	
Optimal Certificate Update Interval Considering Communication Costs in PKI	235
<i>S. Nakamura, M. Arafuka and T. Nakagawa</i>	
Bursts and Gaps of Markov Renewal Arrival Processes	245
<i>A. Pacheco and H. Ribeiro</i>	
<b>Part E Management Science</b>	<b>263</b>
Nash Equilibrium for Three Retailers in an Inventory Model with a Fixed Demand Rate	265
<i>H. Hohjo and Y. Teraoka</i>	
A Sequential Expenditure Problem for Public Sector Based on the Outcome	277
<i>T. Nakai</i>	
Calculating the Probabilities of Winning the Asian Qualifiers for 2006 FIFA World Cup	297
<i>M. Suzuki, S. Osaki and N. Hirotsu</i>	
Index	309