Chapter 17 Selecting the Best System

Handbooks in Operations Research and Management Science 13, 501-534 DOI: 10.1016/s0927-0507(06)13017-0

Citation Report

#	Article	IF	CITATIONS
1	Selection and Multiple-Comparison Procedures for Regenerative Systems. , 2006, , .		0
2	Allocation of simulation runs for simulation optimization. , 2007, , .		7
3	Fortieth anniversary special panel: Landmark papers. , 2007, , .		3
4	Recent advances in ranking and selection. , 2007, , .		4
5	New greedy myopic and existing asymptotic sequential selection procedures: preliminary empirical results. , 2007, , .		6
6	Single-stage multiple-comparison procedure for quantiles and other parameters. , 2007, , .		2
7	Finite-sample performance guarantees for one-dimensional stochastic root finding. , 2007, , .		0
8	Fortieth anniversary special panel: Landmark papers. , 2007, , .		1
9	Some topics for simulation optimization. , 2008, , .		34
10	A preliminary study of optimal splitting for rare-event simulation. , 2008, , .		5
11	Run-length variability of two-stage multiple comparisons with the best for steady-state simulations and its implications for choosing first-stage run lengths. , 2008, , .		0
12	Update on economic approach to simulation selection problems. , 2008, , .		0
13	A general framework for the asymptotic validity of two-stage procedures for selection and multiple comparisons with consistent variance estimators. , 2009, , .		1
14	Selection of the best with stochastic constraints. , 2009, , .		10
15	Controlled sequential factorial design for simulation factor screening. European Journal of Operational Research, 2009, 198, 511-519.	3.5	29
16	The conjunction of the knowledge gradient and the economic approach to simulation selection. , 2009, , .		10
17	Simulation optimization with Hybrid Golden Region search. , 2009, , .		3
18	Improved constrained ordinal optimization for simulation-based constrained optimization. , 2009, , .		3

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#	Article	IF	CITATIONS
19	Do mean-based ranking and selection procedures consider systems' risk?. , 2009, , .		1
20	A quantile-based approach to system selection. European Journal of Operational Research, 2010, 202, 764-772.	3.5	35
21	Optimal learning of transition probabilities in the two-agent newsvendor problem. , 2010, , .		3
22	An efficient simulation procedure for point estimation of expected shortfall. , 2010, , .		5
23	On Choosing Parameters in Retrospective-Approximation Algorithms for Stochastic Root Finding and Simulation Optimization. Operations Research, 2010, 58, 889-901.	1.2	75
24	Simulation optimization using the cross-entropy method with optimal computing budget allocation. ACM Transactions on Modeling and Computer Simulation, 2010, 20, 1-22.	0.6	48
25	Bootstrapping-based fixed-width confidence intervals for ranking and selection. , 2010, , .		4
26	Large-deviation sampling laws for constrained simulation optimization on finite sets. , 2010, , .		5
27	Mean-variance based ranking and selection. , 2010, , .		2
28	Finding feasible systems in the presence of constraints on multiple performance measures. ACM Transactions on Modeling and Computer Simulation, 2010, 20, 1-26.	0.6	141
29	Performance measures for Ranking and Selection procedures. , 2010, , .		4
30	A minimal switching procedure for constrained ranking and selection. , 2010, , .		1
31	Information Collection on a Graph. Operations Research, 2011, 59, 188-201.	1.2	21
32	Selecting the best simulated system with weighted control-variate estimators. Mathematics and Computers in Simulation, 2011, 82, 705-717.	2.4	1
33	Continuous optimization via simulation using Golden Region search. European Journal of Operational Research, 2011, 208, 19-27.	3.5	16
34	Discrete-valued, stochastic-constrained simulation optimization with COMPASS. , 2011, , .		2
35	Large-scale ranking and selection using cloud computing. , 2011, , .		16
36	Sequential selection approach for selecting the best system. , 2011, , .		Ο

#	Article	IF	CITATIONS
37	Optimal sampling laws for constrained simulation optimization on finite sets: The bivariate normal case. , 2011, , .		5
38	Selecting the best by comparing simulated systems in a group of three. , 2011, , .		7
39	A Framework for Selecting a Selection Procedure. ACM Transactions on Modeling and Computer Simulation, 2012, 22, 1-23.	0.6	3
40	Approximate Simulation Budget Allocation for Selecting the Best Design in the Presence of Stochastic Constraints. IEEE Transactions on Automatic Control, 2012, 57, 2940-2945.	3.6	98
41	Ranking and selection with unknown correlation structures. , 2012, , .		11
42	Using Dynamic Priority Rules for Optimization of Complex Manufacturing Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 1359-1365.	0.4	0
43	Sequential Sampling with Economics of Selection Procedures. Management Science, 2012, 58, 550-569.	2.4	72
44	Planning and scheduling a fleet of rigs using simulation–optimization. Computers and Industrial Engineering, 2012, 63, 1074-1088.	3.4	28
45	Tutorial: Optimization via simulation with Bayesian statistics and dynamic programming. , 2012, , .		14
46	Selecting the best by comparing simulated systems in a group of three when variances are known and unequal. , 2012, , .		4
47	Ranking and selection meets robust optimization. , 2012, , .		4
48	Optimality functions in stochastic programming. Mathematical Programming, 2012, 135, 293-321.	1.6	19
49	Controlled multistage selection procedures for comparison with a standard. European Journal of Operational Research, 2012, 223, 709-721.	3.5	5
50	Sensitivity analysis for simulation-based decision making: Application to a hospital emergency service design. Simulation Modelling Practice and Theory, 2012, 20, 99-111.	2.2	21
51	A simulation optimization approach for a two-echelon inventory system with service level constraints. European Journal of Operational Research, 2013, 229, 364-374.	3.5	26
52	Adaptive simulation budget allocation for determining the best design. , 2013, , .		0
53	Ranking and selection in a high performance computing environment. , 2013, , .		13
54	Optimal learning with non-Gaussian rewards. , 2013, , .		1

#	Article	IF	CITATIONS
55	Reducing the Conservativeness of Fully Sequential Indifference-Zone Procedures. IEEE Transactions on Automatic Control, 2013, 58, 1613-1619.	3.6	15
56	Simulation Optimization: A Review on Theory and Applications. Zidonghua Xuebao/Acta Automatica Sinica, 2013, 39, 1957-1968.	1.5	18
57	Efficient comparison of constrained systems using dormancy. European Journal of Operational Research, 2013, 224, 340-352.	3.5	16
58	GENETIC ALGORITHM BASED SIMULATION–OPTIMIZATION FOR FIGHTING WILDFIRES. International Journal of Computational Methods, 2013, 10, 1350035.	0.8	9
59	Integer-Ordered Simulation Optimization using R-SPLINE. ACM Transactions on Modeling and Computer Simulation, 2013, 23, 1-24.	0.6	40
60	Optimal Sampling Laws for Stochastically Constrained Simulation Optimization on Finite Sets. INFORMS Journal on Computing, 2013, 25, 527-542.	1.0	75
61	Optimal Budget Allocation for Sample Average Approximation. Operations Research, 2013, 61, 762-776.	1.2	33
62	Upper bounds on the Bayes-optimal procedure for ranking & selection with independent normal priors. , 2013, , .		1
63	Minimizing opportunity cost in selecting the best feasible design. , 2013, , .		3
64	Sequential Bayes-Optimal Policies for Multiple Comparisons with a Known Standard. Operations Research, 2013, 61, 1174-1189.	1.2	31
65	Computational analysis of high-throughput material screens. , 0, , 101-132.		0
66	Simulation optimization: A tutorial overview and recent developments in gradient-based methods. , 2014, , .		36
67	Drug Resistance or Re-Emergence? Simulating Equine Parasites. ACM Transactions on Modeling and Computer Simulation, 2014, 24, 1-23.	0.6	5
68	Sample allocation for multiple attribute selection problems. , 2014, , .		0
69	Optimal Computing Budget Allocation for Complete Ranking. IEEE Transactions on Automation Science and Engineering, 2014, 11, 516-524.	3.4	36
70	Integrating tactical and operational berth allocation decisions via Simulation–Optimization. Computers and Industrial Engineering, 2014, 78, 84-94.	3.4	47
71	A comparison of two parallel ranking and selection procedures. , 2014, , .		7
72	Selection Procedures for Simulations with Multiple Constraints under Independent and Correlated Sampling. ACM Transactions on Modeling and Computer Simulation, 2014, 24, 1-25.	0.6	23

#	Article	IF	CITATIONS
73	Simulation optimization using genetic algorithms with optimal computing budget allocation. Simulation, 2014, 90, 1146-1157.	1.1	18
74	Genetic-algorithm-based simulation optimization considering a single stochastic constraint. European Journal of Operational Research, 2014, 236, 113-125.	3.5	25
75	Multi-objective simulation optimization on finite sets: Optimal allocation via scalarization. , 2015, , .		9
76	Non-monotonicity of probability of correct selection. , 2015, , .		13
77	Optimal sampling laws for bi-objective simulation optimization on finite sets. , 2015, , .		8
78	Asymptotic validity of the Bayes-inspired Indifference Zone procedure: The non-normal known variance case. , 2015, , .		1
79	Comparing Message Passing Interface and MapReduce for large-scale parallel ranking and selection. , 2015, , .		3
80	An introduction to simulation optimization. , 2015, , .		16
81	Computational improvements in bootstrap ranking & selection procedures via multiple comparison with the best. , 2015, , .		2
82	Input uncertainty and indifference-zone ranking & selection. , 2015, , .		16
83	Simulation optimization when facing input uncertainty. , 2015, , .		17
84	A multiple-purpose simulation-based inventory optimization system: Applied to a large detergent company in China. , 2015, , .		1
85	Stochastically Constrained Ranking and Selection via SCORE. ACM Transactions on Modeling and Computer Simulation, 2015, 25, 1-26.	0.6	72
86	Ranking and selection for multiple performance measures using incomplete preference information. European Journal of Operational Research, 2015, 242, 568-579.	3.5	18
87	A simulation-based decision support system for a multi-echelon inventory problem with service level constraints. Computers and Operations Research, 2015, 53, 118-127.	2.4	12
88	Tractable sampling strategies for quantile-based ordinal optimization. , 2016, , .		7
89	A new particle swarm optimization algorithm for noisy optimization problems. Swarm Intelligence, 2016, 10, 161-192.	1.3	31
90	Speeding up pairwise comparisons for large scale ranking and selection. , 2016, , .		4

#	Article	IF	CITATIONS
91	Applying ranking and selection procedures to long-term mitigation for improved network restoration. EURO Journal on Computational Optimization, 2016, 4, 447-481.	1.5	5
92	A Simulation Budget Allocation Procedure for Enhancing the Efficiency of Optimal Subset Selection. IEEE Transactions on Automatic Control, 2016, 61, 62-75.	3.6	55
93	On the optimal computing budget allocation problem for large scale simulation optimization. Simulation Modelling Practice and Theory, 2017, 71, 149-159.	2.2	11
94	Comparison of Kriging-based algorithms for simulation optimization with heterogeneous noise. European Journal of Operational Research, 2017, 261, 279-301.	3.5	65
95	Myopic Allocation Policy With Asymptotically Optimal Sampling Rate. IEEE Transactions on Automatic Control, 2017, 62, 2041-2047.	3.6	30
96	Efficient Ranking and Selection in Parallel Computing Environments. Operations Research, 2017, 65, 821-836.	1.2	58
97	A search acceleration method for optimization problems with transport simulation constraints. Transportation Research Part B: Methodological, 2017, 98, 239-260.	2.8	5
98	A simulation-based multi-objective optimization framework: A case study on inventory management. Omega, 2017, 70, 148-159.	3.6	39
99	Optimal Computing Budget Allocation for Particle Swarm Optimization in Stochastic Optimization. IEEE Transactions on Evolutionary Computation, 2017, 21, 206-219.	7.5	46
100	Adaptive sampling rule for ranking-and-selection problem. , 2017, , .		1
101	Ranking and selection with covariates. , 2017, , .		5
102	A new framework of designing sequential ranking-and-selection procedures. , 2017, , .		0
103	A sequential elimination approach to value-at-risk and conditional value-at-risk selection. , 2017, , .		2
104	History of seeking better solutions, AKA simulation optimization. , 2017, , .		11
105	A Combined Statistical Selection Procedure Measured by the Expected Opportunity Cost. Arabian Journal for Science and Engineering, 2018, 43, 3163-3171.	1.7	1
106	Optimal Computing Budget Allocation to Select the Nondominated Systems—A Large Deviations Perspective. IEEE Transactions on Automatic Control, 2018, 63, 2913-2927.	3.6	22
107	Gradient-Based Myopic Allocation Policy: An Efficient Sampling Procedure in a Low-Confidence Scenario. IEEE Transactions on Automatic Control, 2018, 63, 3091-3097.	3.6	14
108	Efficient Ranking and Selection for Stochastic Simulation Model Based on Hypothesis Test. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2018, 48, 1555-1565.	5.9	15

#	Article	IF	Citations
109	Dynamic Sampling for Feasibility Determination. , 2018, , .		1
110	Tractable Sampling Strategies for Ordinal Optimization. Operations Research, 2018, 66, 1693-1712.	1.2	15
111	Planning labor evacuation for construction sites using BIM and agent-based simulation. Safety Science, 2018, 109, 174-185.	2.6	65
112	Ranking and Selection as Stochastic Control. IEEE Transactions on Automatic Control, 2018, 63, 2359-2373.	3.6	60
113	Identifying efficient solutions via simulation: myopic multi-objective budget allocation for the bi-objective case. OR Spectrum, 2019, 41, 831-865.	2.1	5
114	An Introduction to Multiobjective Simulation Optimization. ACM Transactions on Modeling and Computer Simulation, 2019, 29, 1-36.	0.6	36
115	Considering sample means in Rinott's procedure with a Bayesian approach. European Journal of Operational Research, 2019, 273, 249-258.	3.5	2
116	Customer Incentive Rebalancing Plan in Free-Float Bike-Sharing System with Limited Information. Sustainability, 2019, 11, 3088.	1.6	14
117	Ranking and Selection. ACM Transactions on Modeling and Computer Simulation, 2019, 29, 1-24.	0.6	2
118	Optimising the barrier coverage of a wireless sensor network with hub-and-spoke topology using mathematical and simulation models. Computers and Operations Research, 2019, 106, 36-48.	2.4	19
119	Bayesian Simulation Optimization with Common Random Numbers. , 2019, , .		4
120	Heterogeneous Assets Market Design. , 2019, , .		0
121	DA-OCBA: Distributed Asynchronous Optimal Computing Budget Allocation Algorithm of Simulation Optimization Using Cloud Computing. Symmetry, 2019, 11, 1297.	1.1	1
122	A Heuristic Approach for Selecting Best-Subset Including Ranking Within the Subset. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2020, 50, 3852-3862.	5.9	5
123	Multi-objective ranking and selection: Optimal sampling laws and tractable approximations via SCORE. Journal of Simulation, 2020, 14, 21-40.	1.0	9
124	Distributionally Robust Selection of the Best. Management Science, 2020, 66, 190-208.	2.4	17
125	Determining resource requirements for elections using indifference-zone generalized binary search. Computers and Industrial Engineering, 2020, 140, 106243.	3.4	4
126	The Assessor's Dilemma: Improving Bug Repair via Empirical Game Theory. IEEE Transactions on Software Engineering, 2021, 47, 2143-2161.	4.3	7

#	Article	IF	CITATIONS
127	Stochastic Control Framework for Determining Feasible Alternatives in Sampling Allocation. IEEE Transactions on Automatic Control, 2020, 65, 2647-2653.	3.6	5
128	A simulation–optimization framework for short-term underground mine production scheduling. Optimization and Engineering, 2020, 21, 939-971.	1.3	19
129	Information theory for ranking and selection. Naval Research Logistics, 2020, 67, 239-253.	1.4	1
130	Near-Optimal A-B Testing. Management Science, 2020, 66, 4477-4495.	2.4	25
131	A Heuristic Procedure for Selecting the Best Feasible Design in the Presence of Stochastic Constraints. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2021, 51, 1016-1026.	5.9	5
132	Asymptotic efficiency analysis on the modified Paulson's procedure with a PAC guarantee. Operations Research Letters, 2021, 49, 35-39.	0.5	1
133	Efficient Sampling Allocation Procedures for Optimal Quantile Selection. INFORMS Journal on Computing, 2021, 33, 230-245.	1.0	8
134	Online Ordinal Optimization under Model Misspecification. SSRN Electronic Journal, 0, , .	0.4	0
135	Ranking and Selection with Covariates for Personalized Decision Making. INFORMS Journal on Computing, 0, , .	1.0	17
136	Nested Monte Carlo simulation in financial reporting: a review and a new hybrid approach. Scandinavian Actuarial Journal, 2021, 2021, 744-778.	1.0	4
137	Dynamic Sampling Allocation Under Finite Simulation Budget for Feasibility Determination. INFORMS Journal on Computing, 2022, 34, 557-568.	1.0	7
138	Bandit-Based Monte Carlo Optimization for Nearest Neighbors. IEEE Journal on Selected Areas in Information Theory, 2021, 2, 599-610.	1.9	1
139	A Practical Approach to Subset Selection for Multi-objective Optimization via Simulation. ACM Transactions on Modeling and Computer Simulation, 2021, 31, 1-15.	0.6	1
140	Ranking and Selection: Efficient Simulation Budget Allocation. Profiles in Operations Research, 2015, , 45-80.	0.3	41
141	Stochastic Constraints and Variance Reduction Techniques. Profiles in Operations Research, 2015, , 245-276.	0.3	6
142	Parallel Ranking and Selection. Simulation Foundations, Methods and Applications, 2017, , 249-275.	0.8	25
143	Better Big Data via Data Farming Experiments. Simulation Foundations, Methods and Applications, 2017, , 159-179.	0.8	16
144	SCORE Allocations for Bi-objective Ranking and Selection. ACM Transactions on Modeling and Computer Simulation, 2018, 28, 1-28.	0.6	11

#	Article	IF	CITATIONS
145	Optimal Learning in Linear Regression with Combinatorial Feature Selection. INFORMS Journal on Computing, 2016, 28, 721-735.	1.0	14
146	Discrete Convex Simulation Optimization. SSRN Electronic Journal, 0, , .	0.4	1
147	Condition-based Maintenance Policy Optimization Using Genetic Algorithms and Gaussian Markov Improvement Algorithm. Proceedings of the Annual Conference of the Prognostics and Health Management Society Prognostics and Health Management Society Conference, 2018, 10, .	0.2	7
151	Decision support algorithms for optimizing surgery start times considering the performance variation. Health Care Management Science, 2021, , 1.	1.5	1
152	On the asymptotic efficiency of selection procedures for independent Gaussian populations. Electronic Journal of Statistics, 2017, 11, .	0.4	1
153	Context-Dependent Ranking and Selection under a Bayesian Framework. , 2020, , .		8
154	Evaluation of bi-Pass for Parallel Simulation Optimization. , 2020, , .		5
155	Revisiting Subset Selection. , 2020, , .		5
156	Incremental Improvements of Heuristic Policies for Average-Reward Markov Decision Processes. IFAC-PapersOnLine, 2020, 53, 1721-1728.	0.5	0
158	Posterior-Based Stopping Rules for Bayesian Ranking-and-Selection Procedures. INFORMS Journal on Computing, 2022, 34, 1711-1728.	1.0	4
159	Robust Sampling Budget Allocation Under Deep Uncertainty. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2022, 52, 6339-6347.	5.9	0
160	Efficient learning for decomposing and optimizing random networks. Fundamental Research, 2022, , .	1.6	Ο
161	Bayesian-based indifference-zone multi-objective ranking and selection procedures. Computers and Industrial Engineering, 2022, 167, 108007.	3.4	0
164	Expected Value of Information Methods for Contextual Ranking and Selection: Clinical Trials and Simulation Optimization. , 2021, , .		1
165	Dynamic Sampling Policy For Subset Selection. , 2021, , .		0
168	Gradient-Based Algorithms for Convex Discrete Optimization via Simulation. Operations Research, O, , .	1.2	2
169	Input Uncertainty in Stochastic Simulation. , 2022, , 573-620.		4
170	Learning Personalized Treatment Strategies with Predictive and Prognostic Covariates in Adaptive Clinical Trials. SSRN Electronic Journal, 0, , .	0.4	Ο

#	Article	IF	CITATIONS
171	Optimal budget allocation policy for tabu search in stochastic simulation optimization. Computers and Operations Research, 2023, 150, 106046.	2.4	7
172	Simulation optimization in healthcare resource planning: A literature review. IISE Transactions, 2023, 55, 985-1007.	1.6	2
173	Selecting a set of best stochastic inventory policies measured by opportunity cost. AIMS Mathematics, 2022, 8, 4892-4906.	0.7	0
174	Foundations ofÂRanking & amp; Selection forÂSimulation Optimization. , 2022, , 353-379.		0
175	Convergence Analysis of Stochastic Kriging-Assisted Simulation with Random Covariates. INFORMS Journal on Computing, 2023, 35, 386-402.	1.0	0
178	Strategy Optimization for Range Gate Pull-Off Track-Deception Jamming Under Black-Box Circumstance. IEEE Transactions on Aerospace and Electronic Systems, 2023, 59, 4262-4273.	2.6	10
179	Let's Do Ranking & Selection. , 2022, , .		0
180	Optimizing Input Data Acquisition for Ranking and Selection: A View Through the Most Probable Best. , 2022, , .		0
181	Metamodel-based simulation optimization considering a single stochastic constraint. Computers and Operations Research, 2023, 155, 106239.	2.4	0
182	Many-Objective Quality Measures. Natural Computing Series, 2023, , 113-148.	2.2	1

183 Simulation Optimization of Medical Decision Making. , 2023, , 71-85.

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