Melvyn Sim

List of Publications by Citations

56 papers	7,045 citations	28 h-index	68 g-index
68 ext. papers	8,618 ext. citations	2.6 avg, IF	6.36 L-index

#	Paper	IF	Citations
56	The Price of Robustness. *Operations Research*, **2004**, 52, 35-53	2.3	2485
55	Robust discrete optimization and network flows. *Mathematical Programming*, **2003**, 98, 49-71	2.1	1090
54	Distributionally Robust Convex Optimization. *Operations Research*, **2014**, 62, 1358-1376	2.3	365
53	Distributionally Robust Optimization and Its Tractable Approximations. *Operations Research*, **2010**, 58, 902-917	2.3	324
52	Robust linear optimization under general norms. *Operations Research Letters*, **2004**, 32, 510-516	1	290
51	A Robust Optimization Perspective on Stochastic Programming. *Operations Research*, **2007**, 55, 1058-1071	2.3	224
50	Optimising train movements through coast control using genetic algorithms. *IET Electric Power Applications*, **1997**, 144, 65		212
49	Risk Aversion in Inventory Management. *Operations Research*, **2007**, 55, 828-842	2.3	208
48	Tractable Approximations to Robust Conic Optimization Problems. *Mathematical Programming*, **2006**, 107, 5-36	2.1	202
47	From CVaR to Uncertainty Set: Implications in Joint Chance-Constrained Optimization. *Operations Research*, **2010**, 58, 470-485	2.3	180
46	Vehicle routing problem with time windows and a limited number of vehicles. *European Journal of Operational Research*, **2003**, 148, 559-569	5.6	152
45	A Linear Decision-Based Approximation Approach to Stochastic Programming. *Operations Research*, **2008**, 56, 344-357	2.3	133
44	Constructing Risk Measures from Uncertainty Sets. *Operations Research*, **2009**, 57, 1129-1141	2.3	112
43	Robust Approximation to Multiperiod Inventory Management. *Operations Research*, **2010**, 58, 583-594	2.3	97
42	Incorporating Asymmetric Distributional Information in Robust Value-at-Risk Optimization. *Management Science*, **2008**, 54, 573-585	3.9	93
41	Adaptive Distributionally Robust Optimization. *Management Science*, **2019**, 65, 604-618	3.9	75
40	TRACTABLE ROBUST EXPECTED UTILITY AND RISK MODELS FOR PORTFOLIO OPTIMIZATION. *Mathematical Finance*, **2010**, 20, 695-731	2.3	68

39	Satisficing Measures for Analysis of Risky Positions. *Management Science*, **2009**, 55, 71-84	3.9	66
38	Goal-Driven Optimization. *Operations Research*, **2009**, 57, 342-357	2.3	60
37	Robust Optimization Made Easy with ROME. *Operations Research*, **2011**, 59, 973-985	2.3	56
36	Routing Optimization Under Uncertainty. *Operations Research*, **2016**, 64, 186-200	2.3	52
35	Robust Storage Assignment in Unit-Load Warehouses. *Management Science*, **2012**, 58, 2114-2130	3.9	52
34	Managing Underperformance Risk in Project Portfolio Selection. *Operations Research*, **2015**, 63, 660-675	2.3	45
33	Location and Routing Models for Emergency Response Plans with Priorities. *Communications in Computer and Information Science*, **2012**, 129-140	0.3	42
32	Adjustable Robust Optimization via Fourier–Motzkin Elimination. *Operations Research*, **2018**, 66, 1086-1100	2.3	33
31	Portfolio value-at-risk optimization for asymmetrically distributed asset returns. *European Journal of Operational Research*, **2012**, 221, 397-406	5.6	33
30	A Robust Optimization Model for Managing Elective Admission in a Public Hospital. *Operations Research*, **2015**, 63, 1452-1467	2.3	32
29	Aspirational Preferences and Their Representation by Risk Measures. *Management Science*, **2012**, 58, 2095-2113	3.9	32
28	Robust Stochastic Optimization Made Easy with RSOME. *Management Science*, **2020**, 66, 3329-3339	3.9	24
27	Asymmetry and Ambiguity in Newsvendor Models. *Management Science*, **2018**, 64, 3146-3167	3.9	23
26	Distributionally Robust Optimization with Infinitely Constrained Ambiguity Sets. *Operations Research*, **2019**, 67, 1328-1344	2.3	20
25	Convergence properties of constrained linear system under MPC control law using affine disturbance feedback. *Automatica*, **2009**, 45, 1715-1720	5.7	16
24	Routing optimization with time windows under uncertainty. *Mathematical Programming*, **2019**, 175, 263-305	2.1	16
23	Preferences for travel time under risk and ambiguity: Implications in path selection and network equilibrium. *Transportation Research Part B: Methodological*, **2016**, 94, 264-284	7.2	15
22	Multiple Objectives Satisficing Under Uncertainty. *Operations Research*, **2013**, 61, 214-227	2.3	14

21	An optimization model for power grid fortification to maximize attack immunity. *International Journal of Electrical Power and Energy Systems*, **2018**, 99, 594-602	5.1	13
20	Model Predictive Control Using Segregated Disturbance Feedback. *IEEE Transactions on Automatic Control*, **2010**, 55, 831-840	5.9	13
19	Constrained linear system with disturbance: Convergence under disturbance feedback. *Automatica*, **2008**, 44, 2583-2587	5.7	10
18	Data-Driven Patient Scheduling in Emergency Departments: A Hybrid Robust-Stochastic Approach. *Management Science*, **2019**, 65, 4123-4140	3.9	9
17	On Dynamic Decision Making to Meet Consumption Targets. *Operations Research*, **2015**, 63, 1117-1130	2.3	9
16	Model predictive control using affine disturbance feedback for constrained linear system **2007**,		8
15	Risk-Based Manpower Planning: A Tractable Multi-Period Model. *SSRN Electronic Journal*, **2018**,	1	5
14	Robust Data-Driven Vehicle Routing with Time Windows. *Operations Research*, **2021**, 69, 469-485	2.3	5
13	SKEWNESS-AWARE ASSET ALLOCATION: A NEW THEORETICAL FRAMEWORK AND EMPIRICAL EVIDENCE. *Mathematical Finance*, **2012**, 22, 379-410	2.3	4
12	Beyond Risk: Ambiguity in Supply Chains103-124		4
11	Linear systems with chance constraints: Constraint-admissible set and applications in predictive control **2009**,		3
10	Constrained linear system under disturbance feedback: Convergence with probability one **2008**,		3
9	Joint Estimation and Robustness Optimization. *SSRN Electronic Journal*, **2019**,	1	2
8	Model predictive control using segregated disturbance feedback **2008**,		2
7	The Dao of Robustness. *SSRN Electronic Journal*,	1	2
6	Strategic Workforce Planning Under Uncertainty. *Operations Research*, **2022**, 70, 1042-1065	2.3	2
5	Portfolio Value-at-Risk Optimization for Asymmetrically Distributed Asset Returns. *SSRN Electronic Journal*, **2009**,	1	1
4	Distributed model predictive control of dynamically decoupled linear systems with coupled cost **2009**,		1

3	Robust Satisficing. *Operations Research*,	2.3	1
2	Goal scoring, coherent loss and applications to machine learning. *Mathematical Programming*, **2020**, 182, 103-140	2.1	1
1	Robust Conic Satisficing. *SSRN Electronic Journal*,	1	1