

# Sunderesh Heragu

## List of Publications by Year in descending order

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103  
papers

4,661  
citations

108046

37  
h-index

120465

65  
g-index

108  
all docs

108  
docs citations

108  
times ranked

2127  
citing authors

#	ARTICLE	IF	CITATIONS
1	The EMS vehicle patient transportation problem during a demand surge. Journal of Global Optimization, 2021, 79, 989-1006.	1.1	7
2	Lessons from Modeling and Running the World's Largest Drive-Through Mass Vaccination Clinic. Interfaces, 2021, 51, 91-105.	1.6	9
3	Digital Twin of COVID-19 Mass Vaccination Centers. Sustainability, 2021, 13, 7396.	1.6	22
4	Outbound Logistics and Distribution Management. Lecture Notes in Logistics, 2019, , 305-330.	0.6	0
5	Design for manufacturing and assembly/disassembly: joint design of products and production systems. International Journal of Production Research, 2018, 56, 7181-7189.	4.9	48
6	A simulation-based optimization approach for mitigation of pandemic influenza. IIE Transactions on Healthcare Systems Engineering, 2017, 7, 107-120.	1.2	6
7	A multi-tier linking approach to analyze performance of autonomous vehicle-based storage and retrieval systems. Computers and Operations Research, 2017, 83, 173-188.	2.4	29
8	Modelling and solution of a large-scale vehicle routing problem at GE appliances & lighting. International Journal of Production Research, 2017, 55, 1100-1116.	4.9	11
9	A simulation framework for studying blocking effects in warehouse systems with autonomous vehicles. European Journal of Industrial Engineering, 2016, 10, 51.	0.5	15
10	CONWIP: closed or semi-open queuing network?. International Journal of Operational Research, 2015, 24, 356.	0.1	4
11	Stochastic models for unit-load operations in warehouse systems with autonomous vehicles. Annals of Operations Research, 2015, 231, 129-155.	2.6	40
12	Queuing models to analyze dwell-point and cross-aisle location in autonomous vehicle-based warehouse systems. European Journal of Operational Research, 2015, 242, 72-87.	3.5	71
13	Designing a large-scale emergency logistics network - a case study for Kentucky. European Journal of Industrial Engineering, 2014, 8, 513.	0.5	15
14	Modeling and evaluating the AVS/RS with tier-to-tier vehicles using a semi-open queueing network. IIE Transactions, 2014, 46, 905-927.	2.1	50
15	Matrix-geometric solution for semi-open queuing network model of autonomous vehicle storage and retrieval system. Computers and Industrial Engineering, 2014, 68, 78-86.	3.4	83
16	Blocking Effects in Warehouse Systems With Autonomous Vehicles. IEEE Transactions on Automation Science and Engineering, 2014, 11, 439-451.	3.4	46
17	Simulation Optimization and a Case Study. , 2014, , 2159-2170.		0
18	Simulation and optimization modeling for drive-through mass vaccination " A generalized approach. Simulation Modelling Practice and Theory, 2013, 37, 99-106.	2.2	38

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19	An Approximate Solution for Semi-Open Queueing Network Model of an Autonomous Vehicle Storage and Retrieval System. IEEE Transactions on Automation Science and Engineering, 2013, 10, 205-215.	3.4	63
20	Optimization of production and inventory policies for dishwasher wire rack production through simulation. , 2013, , .		1
21	The application of linear programming by the General Electric Company to efficiently allocate routes to trucking companies. European Journal of Industrial Engineering, 2013, 7, 38.	0.5	2
22	Modeling Automated Warehouses Using Semi-Open Queueing Networks. Profiles in Operations Research, 2013, , 29-71.	0.3	3
23	Comparing dynamic risk-based scheduling methods with MRP via simulation. International Journal of Production Research, 2012, 50, 921-937.	4.9	7
24	Performance comparison of two material handling systems: AVS/RS and CBAS/RS. International Journal of Production Research, 2012, 50, 4061-4074.	4.9	39
25	Performance analysis and design trade-offs in warehouses with autonomous vehicle technology. IIE Transactions, 2012, 44, 1045-1060.	2.1	110
26	An optimization approach for dispatching and relocating EMS vehicles. IIE Transactions on Healthcare Systems Engineering, 2012, 2, 211-223.	0.8	16
27	A New Technology For Unit-Load Automated Storage System: Autonomous Vehicle Storage and Retrieval System. , 2012, , 285-339.		7
28	Using UICDS to Share Data in the Real-Time Decision Support System for Pandemic Response. , 2011, , .		1
29	Simulation of mitigation strategies for a pandemic influenza. , 2011, , .		3
30	Analytical models for analysis of automated warehouse material handling systems. International Journal of Production Research, 2011, 49, 6833-6861.	4.9	102
31	Simulation based performance analysis of an autonomous vehicle storage and retrieval system. Simulation Modelling Practice and Theory, 2011, 19, 1640-1650.	2.2	45
32	iResTrac. , 2011, , .		1
33	Performance modelling of autonomous vehicle storage and retrieval systems with generally distributed service times. European Journal of Industrial Engineering, 2011, 5, 448.	0.5	3
34	Analysis of manufacturing systems via single-class, semi-open queueing networks. International Journal of Production Research, 2011, 49, 295-319.	4.9	18
35	Simulation based experimental design to identify factors affecting performance of AVS/RS. Computers and Industrial Engineering, 2010, 58, 175-185.	3.4	88
36	Approximate analysis of load-dependent generally distributed queueing networks with low service time variability. European Journal of Operational Research, 2010, 205, 381-389.	3.5	23

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37	Integrated production-inventory-distribution optimisation in a multi-echelon, multi-product, multi-carrier, multi-period system. International Journal of Value Chain Management, 2010, 4, 267.	0.1	4
38	Simulation-based regression analysis for the rack configuration of an autonomous vehicle storage and retrieval system. International Journal of Production Research, 2010, 48, 6257-6274.	4.9	68
39	Vehicle interference effects in warehousing systems with autonomous vehicles. , 2010, , .		0
40	Simulation analysis of a multi-item MRP system based on factorial design. , 2009, , .		5
41	Two-level manufacturing system performance analyser. International Journal of Production Research, 2009, 47, 2301-2326.	4.9	5
42	Simulation based regression analysis for rack configuration of autonomous vehicle storage and retrieval system. , 2009, , .		5
43	Impact of zones on throughput and cycle times in warehouses with Autonomous Vehicles. , 2009, , .		6
44	Solving Semi-Open Queuing Networks. Operations Research, 2009, 57, 391-401.	1.2	62
45	Analysis of autonomous vehicle storage and retrieval system by open queueing network. , 2009, , .		10
46	Variance-based approximations of transaction waiting times in autonomous vehicle storage and retrieval systems. European Journal of Industrial Engineering, 2009, 3, 146.	0.5	64
47	Simulation based optimization of multi-location transshipment problem with capacitated transportation. , 2008, , .		9
48	Order oriented slotting: a new assignment strategy for warehouses. European Journal of Industrial Engineering, 2007, 1, 301.	0.5	35
49	A multimedia educational tool integrating materials handling technology, analysis and design using a virtual distribution center. European Journal of Industrial Engineering, 2007, 1, 93.	0.5	0
50	Stochastic Models for Facilities Logistics. Engineering and Management Innovation, 2007, , .	0.1	0
51	A Survey of Automated Material Handling Systems in 300-mm Semiconductor Fabs. IEEE Transactions on Semiconductor Manufacturing, 2006, 19, 112-120.	1.4	95
52	Mathematical model for warehouse design and product allocation. International Journal of Production Research, 2005, 43, 327-338.	4.9	129
53	Batch size modeling in a multi-item, discrete manufacturing system via an open queueing network. IIE Transactions, 2004, 36, 743-753.	2.1	36
54	A Lagrangian relaxation approach to solving the integrated pick-up/drop-off point and AGV flowpath design problem. Applied Mathematical Modelling, 2004, 28, 735-750.	2.2	34

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55	Reconfigurable layout problem. International Journal of Production Research, 2004, 42, 4709-4729.	4.9	45
56	A hybrid scheduling and control system architecture for warehouse management. IEEE Transactions on Automation Science and Engineering, 2003, 19, 991-1001.	2.4	44
57	Learning to design and analyze Materials Handling systems: developing multimedia tools. European Journal of Engineering Education, 2003, 28, 491-506.	1.5	0
58	Realization of a short cycle time in warehouse replenishment and order picking. International Journal of Production Research, 2003, 41, 349-364.	4.9	19
59	Clustering-based order-picking sequence algorithm for an automated warehouse. International Journal of Production Research, 2003, 41, 3445-3460.	4.9	36
60	Multimedia tools for use in materials handling classes. European Journal of Engineering Education, 2003, 28, 375-393.	1.5	6
61	Intelligent agent modeling of an industrial warehousing problem. IIE Transactions, 2002, 34, 601-612.	2.1	54
62	Next Generation Factory Layouts: Research Challenges and Recent Progress. Interfaces, 2002, 32, 58-76.	1.6	133
63	Intelligent agent based framework for manufacturing systems control. IEEE Transactions on Systems, Man and Cybernetics, Part A: Systems and Humans, 2002, 32, 560-573.	3.4	115
64	Intelligent agent modeling of an industrial warehousing problem. IIE Transactions, 2002, 34, 601-612.	2.1	18
65	A review of: "SPIRAL" was developed by Marc Goetschalckx Industrial and Systems Engineering Department, Georgia Institute of Technology, Atlanta, GA, USA. IIE Transactions, 2000, 32, 677-677.	2.1	0
66	Preparing Students for Careers in Material Handling. Journal of Engineering Education, 2000, 89, 439-441.	1.9	1
67	Facility layout design in a changing environment. International Journal of Production Research, 1999, 37, 2429-2446.	4.9	87
68	Stepwise decomposition approaches for large scale cell formation problems. European Journal of Operational Research, 1999, 113, 64-79.	3.5	25
69	HOPE: A genetic algorithm for the unequal area facility layout problem. Computers and Operations Research, 1998, 25, 583-594.	2.4	65
70	Optimal solution of cellular manufacturing system design: Benders' decomposition approach. European Journal of Operational Research, 1998, 107, 175-192.	3.5	62
71	Review of: "Rapid Analysis of Queuing Systems (RAQS)" Developed by: Professor Manjunath Kamath, Oklahoma. IIE Transactions, 1998, 30, 989-989.	2.1	1
72	Review of: "Review of Factory Programs - FactoryCAD, FactoryFLOW, and FactoryPLAN" Cimtechnologies Corporation, ISU Research Park, 2501 North Loop Drive, Ames, IA 50010, USA. IIE Transactions, 1998, 30, 409-410.	2.1	1

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73	Grouping and placement of machine cells. IIE Transactions, 1997, 29, 561-571.	2.1	43
74	Grouping and placement of machine cells. IIE Transactions, 1997, 29, 561-571.	2.1	13
75	Advances in discrete material handling system design. Sadhana - Academy Proceedings in Engineering Sciences, 1997, 22, 281-292.	0.8	6
76	An interactive program for machine grouping and layout. , 1997, , 180-203.		1
77	A combined branch-and-bound and genetic algorithm based approach for a flowshop scheduling problem. Annals of Operations Research, 1996, 63, 397-414.	2.6	63
78	A Branch-and-Bound Approach for a Two-machine Flowshop Scheduling Problem. Journal of the Operational Research Society, 1995, 46, 721-734.	2.1	73
79	Multiple and bicriteria scheduling: A literature survey. European Journal of Operational Research, 1995, 81, 88-104.	3.5	203
80	A heuristic for designing cellular manufacturing facilities. International Journal of Production Research, 1994, 32, 125-140.	4.9	39
81	Group technology and cellular manufacturing. IEEE Transactions on Systems, Man, and Cybernetics, 1994, 24, 203-215.	0.9	150
82	Recent models and techniques for solving the layout problem. European Journal of Operational Research, 1992, 57, 136-144.	3.5	75
83	Integrating the grouping and layout problems in cellular manufacturing systems. Computers and Industrial Engineering, 1992, 23, 55-58.	3.4	34
84	Experimental analysis of simulated annealing based algorithms for the layout problem. European Journal of Operational Research, 1992, 57, 190-202.	3.5	182
85	Implications of implementing just-in-time systems. Technovation, 1991, 11, 143-162.	4.2	10
86	Efficient models for the facility layout problem. European Journal of Operational Research, 1991, 53, 1-13.	3.5	244
87	A 3-OPT based simulated annealing algorithm for vehicle routing problems. Computers and Industrial Engineering, 1991, 21, 635-639.	3.4	54
88	Techniques for Machine Layout Optimization in Manufacturing and Automation Systems1 1This chapter is based on a paper titled "Recent Models and Solution Techniques for Facility Layout" by the author that is to appear in European Journal of Operational Research.. Control and Dynamic Systems, 1991, 46, 137-172.	0.1	0
89	Modeling the machine layout problem. Computers and Industrial Engineering, 1990, 19, 294-298.	3.4	4
90	Machine layout: an optimization and knowledge-based approach. International Journal of Production Research, 1990, 28, 615-635.	4.9	115

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91	Knowledge based approach to machine cell layout. Computers and Industrial Engineering, 1989, 17, 37-42.	3.4	11
92	Expert systems and optimization. IEEE Transactions on Software Engineering, 1989, 15, 1017-1020.	4.3	18
93	KBSES: A knowledge-based system for equipment selection. International Journal of Advanced Manufacturing Technology, 1988, 3, 97-109.	1.5	8
94	Transportation Approach to Locating Plants in Relation to Potential Markets and Raw Material Sources. Decision Sciences, 1988, 19, 819-829.	3.2	4
95	Computer integrated manufacturing: a structural perspective. IEEE Network, 1988, 2, 14-22.	4.9	14
96	Machine Layout Problem in Flexible Manufacturing Systems. Operations Research, 1988, 36, 258-268.	1.2	270
97	Analysis of expert systems in manufacturing design. IEEE Transactions on Systems, Man, and Cybernetics, 1987, 17, 898-912.	0.9	41
98	The facility layout problem. European Journal of Operational Research, 1987, 29, 229-251.	3.5	517
99	Group technology. Computers in Industry, 1987, 9, 83-91.	5.7	54
100	Materials Handling System Design. , 0, , 1-29.		0
101	Facilities Design. , 0, , .		15
102	Facilities Design. , 0, , .		73
103	A Multi-Tier Linking Approach to Analyze Performance of Vehicle-Based Warehouse Systems. SSRN Electronic Journal, 0, , .	0.4	0