

Richard L Church

List of Publications by Year in descending order

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Version: 2024-02-01

130
papers

8,017
citations

87723

38
h-index

51492

86
g-index

136
all docs

136
docs citations

136
times ranked

4346
citing authors

#	ARTICLE	IF	CITATIONS
1	The maximal covering location problem. <i>Papers in Regional Science</i> , 1974, 32, 101-118.	1.0	1,749
2	Reserve selection as a maximal covering location problem. <i>Biological Conservation</i> , 1996, 76, 105-112.	1.9	396
3	THE MAXIMAL COVERING LOCATION PROBLEM. <i>Papers in Regional Science</i> , 1974, 32, 101-118.	1.0	354
4	A bilevel mixed-integer program for critical infrastructure protection planning. <i>Computers and Operations Research</i> , 2008, 35, 1905-1923.	2.4	307
5	Identifying Critical Infrastructure: The Median and Covering Facility Interdiction Problems. <i>Annals of the American Association of Geographers</i> , 2004, 94, 491-502.	3.0	298
6	Geographical information systems and location science. <i>Computers and Operations Research</i> , 2002, 29, 541-562.	2.4	258
7	Finding shortest paths on real road networks: the case for A*. <i>International Journal of Geographical Information Science</i> , 2009, 23, 531-543.	2.2	255
8	The Team/Fleet Models for Simultaneous Facility and Equipment Siting. <i>Transportation Science</i> , 1979, 13, 163-175.	2.6	218
9	Protecting Critical Assets: The r-Interdiction Median Problem with Fortification. <i>Geographical Analysis</i> , 2007, 39, 129-146.	1.9	213
10	Spatial optimization as a generative technique for sustainable multiobjective land use allocation. <i>International Journal of Geographical Information Science</i> , 2008, 22, 601-622.	2.2	181
11	Mapping transit-based access: integrating GIS, routes and schedules. <i>International Journal of Geographical Information Science</i> , 2010, 24, 283-304.	2.2	178
12	Applying simulated annealing to location-planning models. <i>Journal of Heuristics</i> , 1996, 2, 31-53.	1.1	154
13	An efficient measure of compactness for two-dimensional shapes and its application in regionalization problems. <i>International Journal of Geographical Information Science</i> , 2013, 27, 1227-1250.	2.2	144
14	Theoretical and Computational Links between the p-Median, Location Set-covering, and the Maximal Covering Location Problem. <i>Geographical Analysis</i> , 1976, 8, 406-415.	1.9	138
15	Heuristic solution approaches to operational forest planning problems. <i>OR Spectrum</i> , 1995, 17, 193-203.	2.1	131
16	Planning for Disruptions in Supply Chain Networks. , 2006, , 234-257.		129
17	An exact solution approach for the interdiction median problem with fortification. <i>European Journal of Operational Research</i> , 2008, 189, 76-92.	3.5	124
18	SYMPOSIUM ON LOCATION PROBLEMS: IN MEMORY OF LEON COOPER.. <i>Journal of Regional Science</i> , 1984, 24, 185-201.	2.1	107

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19	Mapping evacuation risk on transportation networks using a spatial optimization model. <i>Transportation Research Part C: Emerging Technologies</i> , 2000, 8, 321-336.	3.9	100
20	Designing robust coverage networks to hedge against worst-case facility losses. <i>European Journal of Operational Research</i> , 2011, 209, 23-36.	3.5	99
21	Contiguity Constraints for Single-Region Site Search Problems. <i>Geographical Analysis</i> , 2000, 32, 306-329.	1.9	95
22	The p -Regions Problem. <i>Geographical Analysis</i> , 2011, 43, 104-126.	1.9	91
23	Computational Procedures for Location Problems on Stochastic Networks. <i>Transportation Science</i> , 1983, 17, 168-180.	2.6	84
24	A Median Location Model with Nonclosest Facility Service. <i>Transportation Science</i> , 1985, 19, 58-74.	2.6	84
25	Improving accessibility to rural health services: The maximal covering network improvement problem. <i>Socio-Economic Planning Sciences</i> , 2009, 43, 102-110.	2.5	84
26	Regional service coverage modeling. <i>Computers and Operations Research</i> , 2008, 35, 339-355.	2.4	81
27	Generalized coverage models and public facility location. <i>Papers in Regional Science</i> , 1983, 53, 117-135.	1.0	79
28	Integrating expected coverage and local reliability for emergency medical services location problems. <i>Socio-Economic Planning Sciences</i> , 2010, 44, 8-18.	2.5	69
29	Selecting sites for rural health workers. <i>Social Science and Medicine</i> , 1982, 16, 63-72.	1.8	68
30	Measuring Accessibility for People with a Disability. <i>Geographical Analysis</i> , 2003, 35, 83-96.	1.9	64
31	COBRA: A New Formulation of the Classic p -Median Location Problem. <i>Annals of Operations Research</i> , 2003, 122, 103-120.	2.6	61
32	A hybrid fleet model for emergency medical service system design. <i>Social Science and Medicine</i> , 1988, 26, 163-171.	1.8	56
33	Closest assignment constraints and location models: Properties and structure. <i>Location Science</i> , 1996, 4, 251-270.	0.2	55
34	Constructing Cell-Based Habitat Patches Useful in Conservation Planning. <i>Annals of the American Association of Geographers</i> , 2003, 93, 814-827.	3.0	54
35	Measuring the efficacy of adjacency constraint structure in forest planning models. <i>Canadian Journal of Forest Research</i> , 1995, 25, 1416-1424.	0.8	51
36	BEAMR: An exact and approximate model for the p -median problem. <i>Computers and Operations Research</i> , 2008, 35, 417-426.	2.4	47

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37	The stochastic interdiction median problem with disruption intensity levels. <i>Annals of Operations Research</i> , 2012, 201, 345-365.	2.6	47
38	Modeling School Utilization and Consolidation. <i>Journal of the Urban Planning and Development Division, ASCE</i> , 1993, 119, 23-38.	0.8	45
39	Protecting Supply Systems to Mitigate Potential Disaster. <i>International Regional Science Review</i> , 2012, 35, 188-210.	1.0	44
40	Transmission Corridor Location Modeling. <i>Journal of Transportation Engineering</i> , 1985, 111, 114-130.	0.9	41
41	Restoring forest landscapes for biodiversity conservation and rural livelihoods: A spatial optimisation model. <i>Environmental Modelling and Software</i> , 2011, 26, 1622-1638.	1.9	38
42	An interface for exploring spatial alternatives for a corridor location problem. <i>Computers and Geosciences</i> , 1992, 18, 1095-1105.	2.0	36
43	Locational issues in forest management. <i>Location Science</i> , 1998, 6, 137-153.	0.2	36
44	Habitat evaluation using GIS. <i>Landscape and Urban Planning</i> , 2001, 52, 239-255.	3.4	35
45	A GRASP and Path Relinking Heuristic for Rural Road Network Development. <i>Journal of Heuristics</i> , 2005, 11, 89-108.	1.1	34
46	A Family of Location Models for Multiple-Type Discrete Dispersion. <i>Geographical Analysis</i> , 2006, 38, 248-270.	1.9	34
47	The p-Compact regions Problem. <i>Geographical Analysis</i> , 2014, 46, 250-273.	1.9	34
48	A Bicriterion Maximal Covering Location Formulation Which Considers the Satisfaction of Uncovered Demand. <i>Decision Sciences</i> , 1991, 22, 38-52.	3.2	33
49	Analysis of Facility Systems's Reliability When Subject to Attack or a Natural Disaster. , 2007, , 221-241.		33
50	Review of obnoxious facilities location problems. <i>Computers and Operations Research</i> , 2022, 138, 105468.	2.4	31
51	Aggregation in continuous space coverage modeling. <i>International Journal of Geographical Information Science</i> , 2012, 26, 795-816.	2.2	30
52	Locating short-term empty-container storage facilities to support port operations: A user optimal approach. <i>Transportation Research, Part E: Logistics and Transportation Review</i> , 2011, 47, 738-754.	3.7	29
53	The SITES reserve selection system: A critical review. <i>Environmental Modeling and Assessment</i> , 2005, 10, 215-228.	1.2	28
54	Commercial GIS location analytics: capabilities and performance. <i>International Journal of Geographical Information Science</i> , 2019, 33, 1106-1130.	2.2	28

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55	Forest management models and combinatorial algorithms: analysis of state of the art. <i>Annals of Operations Research</i> , 2000, 96, 271-285.	2.6	27
56	GENERALIZED COVERAGE MODELS AND PUBLIC FACILITY LOCATION. <i>Papers in Regional Science</i> , 1983, 53, 117-135.	1.0	25
57	An Analysis of Ancient Egyptian Settlement Patterns Using Location Allocation Covering Models. <i>Annals of the American Association of Geographers</i> , 1988, 78, 701-714.	3.0	23
58	Corridor location: the multi-gateway shortest path model. <i>Journal of Geographical Systems</i> , 2014, 16, 287-309.	1.9	23
59	Vector Assignment Ordered Median Problem. <i>International Regional Science Review</i> , 2014, 37, 194-224.	1.0	23
60	An extendable heuristic framework to solve the p-compact-regions problem for urban economic modeling. <i>Computers, Environment and Urban Systems</i> , 2014, 43, 1-13.	3.3	23
61	Estimating spatial efficiency using cyber search, GIS, and spatial optimization: a case study of fire service deployment in Los Angeles County. <i>International Journal of Geographical Information Science</i> , 2016, 30, 535-553.	2.2	23
62	Selecting conservation reserves using species-covering models: Adapting the ARC/INFO GIS. <i>Transactions in GIS</i> , 1997, 2, 45-60.	1.0	21
63	On a bi-level formulation to protect uncapacitated p-median systems with facility recovery time and frequent disruptions. <i>Electronic Notes in Discrete Mathematics</i> , 2010, 36, 591-598.	0.4	21
64	A unified approach for location-allocation analysis: integrating GIS, distributed computing and spatial optimization. <i>International Journal of Geographical Information Science</i> , 2016, 30, 515-534.	2.2	21
65	The Nested Hierarchical Median Facility Location Model. <i>Infor</i> , 1991, 29, 100-102.	0.5	20
66	Single facility siting involving allocation decisions. <i>European Journal of Operational Research</i> , 2020, 284, 834-846.	3.5	20
67	The Regionally Constrained p-Median Problem. <i>Geographical Analysis</i> , 1990, 22, 22-32.	1.9	18
68	Commentary On "The Highest Form of the Geographer's Art". <i>Annals of the American Association of Geographers</i> , 1982, 72, 557-558.	3.0	17
69	Constructing And Selecting Adjacency Constraints. <i>Infor</i> , 1996, 34, 232-248.	0.5	17
70	Concurrent optimization of harvesting and road network layouts under steep terrain. <i>Annals of Operations Research</i> , 2015, 232, 41.	2.6	17
71	Solving the p-median problem on regular and lattice networks. <i>Computers and Operations Research</i> , 2020, 123, 105057.	2.4	17
72	On the unified dispersion problem: Efficient formulations and exact algorithms. <i>European Journal of Operational Research</i> , 2015, 241, 622-630.	3.5	16

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73	The importance of in situ site loss in nature reserve selection: Balancing notions of complementarity and robustness. <i>Biological Conservation</i> , 2007, 135, 170-180.	1.9	15
74	Optimal dispersion and central places. <i>Journal of Geographical Systems</i> , 2007, 9, 167-187.	1.9	15
75	Challenges in applying capacitated covering models. <i>Transactions in GIS</i> , 2020, 24, 268-290.	1.0	15
76	Forest planning at the tactical level. <i>Annals of Operations Research</i> , 2000, 95, 3-18.	2.6	14
77	Corridor Location for Infrastructure Development. <i>International Regional Science Review</i> , 2014, 37, 129-148.	1.0	14
78	Manpower Deployment in Emergency Services. <i>Fire Technology</i> , 2001, 37, 219-234.	1.5	12
79	Cyberinfrastructure, GIS, and spatial optimization: opportunities and challenges. <i>International Journal of Geographical Information Science</i> , 2016, 30, 427-431.	2.2	12
80	A relative access measure to identify barriers to efficient transit use by persons with visual impairments. <i>Disability and Rehabilitation</i> , 2005, 27, 769-779.	0.9	11
81	Optimizing cable harvesting layout when using variable-length cable roads in central Europe. <i>Canadian Journal of Forest Research</i> , 2014, 44, 949-960.	0.8	11
82	Maximal covering tree problems. <i>Naval Research Logistics</i> , 1993, 40, 129-142.	1.4	10
83	A Unified Model for Dispersing Facilities. <i>Geographical Analysis</i> , 2013, 45, 401-418.	1.9	10
84	Location Problems Under Disaster Events. , 2015, , 623-642.		9
85	Location set-covering inspired models for designing harvesting and cable road layouts. <i>European Journal of Forest Research</i> , 2018, 137, 771-792.	1.1	8
86	Extensions to the Weber problem. <i>Computers and Operations Research</i> , 2022, 143, 105786.	2.4	8
87	Designing Robust Coverage Systems: A Maximal Covering Model with Geographically Varying Failure Probabilities. <i>Annals of the American Association of Geographers</i> , 2014, 104, 922-938.	3.0	7
88	Location-allocation Modeling. <i>Geographic Information Science & Technology Body of Knowledge</i> , 2018, 2018, .	0.1	7
89	Service allocation equity in location coverage analytics. <i>European Journal of Operational Research</i> , 2023, 305, 21-37.	3.5	7
90	LINEAR PROGRAMS FOR NONLINEAR HYDROLOGIC ESTIMATION. <i>Journal of the American Water Resources Association</i> , 1990, 26, 645-656.	1.0	6

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91	Unpacking Central Place Geometry I: Single Level Theoretical k Systems. Geographical Analysis, 1990, 22, 95-115.	1.9	6
92	Optimum Location of Motorway Interchanges: Usersâ€™ Perspective. Journal of Transportation Engineering, 2010, 136, 956-963.	0.9	6
93	PPP motorway ventures â€™ an optimization model to locate interchanges with social welfare and private profit objectives. Transportmetrica A: Transport Science, 2016, 12, 832-852.	1.3	6
94	Toblerâ€™s Law and Spatial Optimization. International Regional Science Review, 2018, 41, 287-310.	1.0	6
95	A heuristic algorithm for balancing workloads in coverage modeling. Computers, Environment and Urban Systems, 2022, 92, 101746.	3.3	6
96	The p-median scheduling and location problem. Papers in Regional Science, 1991, 70, 21-35.	1.0	5
97	The Shortest Covering Path Problem. International Regional Science Review, 2016, 39, 131-151.	1.0	5
98	Coastal Vulnerability under Extreme Weather. Applied Spatial Analysis and Policy, 2021, 14, 497-523.	1.0	5
99	Drone service response: Spatiotemporal heterogeneity implications. Journal of Transport Geography, 2021, 93, 103074.	2.3	5
100	Location Problems Under Disaster Events. , 2019, , 631-656.		5
101	Location expression standards for ITS: Testing the LRMS Cross Street Profile. Annals of Regional Science, 1999, 33, 197-212.	1.0	4
102	Optimization Models for the Location of Motorway Interchanges: Concessionairesâ€™ Perspective. Journal of Transportation Engineering, 2011, 137, 962-970.	0.9	4
103	Generating optimal and near-optimal solutions to facility location problems. Environment and Planning B: Urban Analytics and City Science, 2020, 47, 1014-1030.	1.0	4
104	Development Density-Based Optimization Modeling of Sustainable Land Use Patterns. , 2006, , 881-896.		4
105	Advancing contiguous environmental land allocation analysis, planning and modeling. Journal of Land Use Science, 2022, 17, 572-590.	1.0	4
106	Introduction to the Special Issue on Location Modeling. Networks and Spatial Economics, 2010, 10, 293-295.	0.7	3
107	On the Finite Optimality Set of the Vector Assignment p -Median Problem. Geographical Analysis, 2015, 47, 134-145.	1.9	3
108	Modeling the Potential for Critical Habitat. Profiles in Operations Research, 2015, , 155-171.	0.3	3

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109	A heuristic for a hybrid fleet model. <i>Computers and Operations Research</i> , 1990, 17, 481-494.	2.4	2
110	Spatial Optimization Models. , 2015, , 172-177.		2
111	Addressing risks and uncertainty in forest land use modeling. <i>Journal of Geographical Systems</i> , 2019, 21, 319-338.	1.9	2
112	Optimizing Safe Routes to School. <i>Socio-Economic Planning Sciences</i> , 2019, 67, 26-33.	2.5	2
113	Anti-cover. <i>Advances in Spatial Science</i> , 2018, , 107-130.	0.3	2
114	Location Modeling and Covering Metrics. <i>Advances in Spatial Science</i> , 2018, , 1-22.	0.3	2
115	SYMPOSIUM ON LOCATION PROBLEMS: IN MEMORY OF LEON COOPER.. <i>Journal of Regional Science</i> , 1984, 24, 159-160.	2.1	1
116	THE p-MEDIAN SCHEDULING AND LOCATION PROBLEM. <i>Papers in Regional Science</i> , 1991, 70, 21-35.	1.0	1
117	A semi-greedy metaheuristic for the European cableway location problem. <i>Journal of Heuristics</i> , 2015, 21, 641-662.	1.1	1
118	Introduction to the 40 Years of Maximal Coverage Special Issue. <i>International Regional Science Review</i> , 2016, 39, 3-4.	1.0	1
119	Characterizing Habitat Elements and Their Distribution over Several Spatial Scales: The Case of the Fisher. <i>Forests</i> , 2017, 8, 186.	0.9	1
120	Shortest Paths from a Group Perspective—A Note on Selfish Routing Games with Cognitive Agents. <i>ISPRS International Journal of Geo-Information</i> , 2018, 7, 345.	1.4	1
121	Big data, spatial optimization, and planning. <i>Environment and Planning B: Urban Analytics and City Science</i> , 2020, 47, 941-947.	1.0	1
122	Disruption, Protection, and Resilience. <i>Advances in Spatial Science</i> , 2018, , 203-227.	0.3	1
123	Service quality modeling to support optimizing facility location in a microscale environment. <i>Socio-Economic Planning Sciences</i> , 2022, , 101273.	2.5	1
124	In Tribute to Dr. Charles S. ReVelle. <i>Geographical Analysis</i> , 2009, 41, 3-8.	1.9	0
125	Classic Beginnings. <i>Advances in Spatial Science</i> , 2018, , 23-47.	0.3	0
126	Probabilistic Coverage. <i>Advances in Spatial Science</i> , 2018, , 81-106.	0.3	0

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127	Grand Challenges. <i>Advances in Spatial Science</i> , 2018, , 255-266.	0.3	0
128	Continuous Space Coverage. <i>Advances in Spatial Science</i> , 2018, , 177-201.	0.3	0
129	Extended Forms of Coverage. <i>Advances in Spatial Science</i> , 2018, , 49-79.	0.3	0
130	Optimal region design to foster industrial diversification. <i>Regional Studies</i> , 0, , 1-17.	2.5	0