Towards a taxonomy of movement patterns

Information Visualization 7, 240-252 DOI: 10.1057/palgrave.ivs.9500182

Citation Report

#	Article	IF	CITATIONS
1	Deriving Low-Level Steering Behaviors from Trajectory Data. , 2009, , .		3
2	Exploring movement-similarity analysis of moving objects. SIGSPATIAL Special, 2009, 1, 11-16.	2.7	9
3	A taxonomy of collective phenomena. Applied Ontology, 2009, 4, 267-292.	2.0	35
4	Visualization of vessel movements. Computer Graphics Forum, 2009, 28, 959-966.	3.0	161
5	Conceptual Framework for Modeling Dynamic Paths from Natural Language Expressions. Transactions in GIS, 2009, 13, 27-45.	2.3	21
6	Revealing the physics of movement: Comparing the similarity of movement characteristics of different types of moving objects. Computers, Environment and Urban Systems, 2009, 33, 419-434.	7.1	153
7	Research Trends in Geographic Information Science. Lecture Notes in Geoinformation and Cartography, 2009, , .	1.0	2
8	Proximity-based visualization of movement trace data. , 2009, , .		58
9	Towards Semantic Interpretation of Movement Behavior. Lecture Notes in Geoinformation and Cartography, 2009, , 271-288.	1.0	36
10	Computing Popular Places Using Graphics Processors. , 2010, , .		1
11	An integrated approach for visual analysis of a multisource moving objects knowledge base. International Journal of Geographical Information Science, 2010, 24, 1543-1558.	4.8	34
12	From Pattern Discovery to Pattern Interpretation in Movement Data. , 2010, , .		5
13	Movement Choremes: Bridging Cognitive Understanding and Formal Characterizations of Movement Patterns ¹ . Topics in Cognitive Science, 2011, 3, 722-740.	1.9	4
14	Evaluation of the Visibility of Vessel Movement Features in Trajectory Visualizations. Computer Graphics Forum, 2011, 30, 801-810.	3.0	17
15	Discovering Chasing Behavior in Moving Object Trajectories. Transactions in GIS, 2011, 15, 667-688.	2.3	21
16	A conceptual framework and taxonomy of techniques for analyzing movement. Journal of Visual Languages and Computing, 2011, 22, 213-232.	1.8	120
17	Interpreting motion events of pairs of moving objects. GeoInformatica, 2011, 15, 247-271.	2.7	18
18	An algorithm to identify avoidance behavior in moving object trajectories. Journal of the Brazilian Computer Society, 2011, 17, 193-203.	1.3	15

#	Article	IF	CITATIONS
19	Towards an online detection of pedestrian flocks in urban canyons by smoothed spatio-temporal clustering of GPS trajectories. , 2011, , .		18
20	Trajectory data analysis using complex networks. , 2011, , .		2
21	Frequent route based continuous moving object location- and density prediction on road networks. , 2011, , .		11
22	Interactive visualization of multivariate trajectory data with density maps. , 2011, , .		68
23	TripVista: Triple Perspective Visual Trajectory Analytics and its application on microscopic traffic data at a road intersection. , 2011, , .		134
24	Computational Movement Analysis. , 2011, , 423-438.		29
25	An event-based conceptual model for context-aware movement analysis. International Journal of Geographical Information Science, 2011, 25, 1347-1370.	4.8	77
26	Algorithmic and visual analysis of spatiotemporal stops in movement data. , 2012, , .		9
27	Spatial Signatures of Mapping Expertise Among Field Geologists. Cartography and Geographic Information Science, 2012, 39, 119-132.	3.0	19
28	Detecting pedestrian flocks by fusion of multi-modal sensors in mobile phones. , 2012, , .		52
29	Detecting movement patterns using Brownian bridges. , 2012, , .		16
30	Visualization of spatio-temporal data of bus trips. , 2012, , .		11
31	A framework for understanding generative art. Digital Creativity, 2012, 23, 239-259.	1.6	23
32	Map Readers' Assessment of Path Elements and Context to Identify Movement Behaviour in Visualisations. Cartographic Journal, 2012, 49, 337-349.	1.5	6
33	Time cylinder to represent data of temporal objects. , 2012, , .		1
34	Movement similarity assessment using symbolic representation of trajectories. International Journal of Geographical Information Science, 2012, 26, 1563-1588.	4.8	109
35	Exploring visitor movement patterns in natural recreational areas. Tourism Management, 2012, 33, 672-682.	9.8	137
36	Analysing spatiotemporal sequences in Bluetooth tracking data. Applied Geography, 2012, 34, 659-668.	3.7	73

#	Article	IF	CITATIONS
37	Spatiotemporal analysis of critical transportation links based on time geographic concepts: a case study of critical bridges in Wuhan, China. Journal of Transport Geography, 2012, 23, 44-59.	5.0	49
38	Mobile sensing of pedestrian flocks in indoor environments using WiFi signals. , 2012, , .		58
40	Advances in Location-Based Services. Lecture Notes in Geoinformation and Cartography, 2012, , .	1.0	6
41	Interactive Density Maps for Moving Objects. IEEE Computer Graphics and Applications, 2012, 32, 56-66.	1.2	19
42	Scalable Detection of Spatiotemporal Encounters in Historical Movement Data. Computer Graphics Forum, 2012, 31, 915-924.	3.0	8
43	Median Trajectories. Algorithmica, 2013, 66, 595-614.	1.3	40
44	Comparing interactive and automated mapping systems for supporting fisheries enforcement activities—a case study on vessel monitoring systems (VMS). Journal of Coastal Conservation, 2013, 17, 105-119.	1.6	10
45	The environmental-data automated track annotation (Env-DATA) system: linking animal tracks with environmental data. Movement Ecology, 2013, 1, 3.	2.8	250
46	A visual exploration of mobile phone users, land cover, time, and space. Pervasive and Mobile Computing, 2013, 9, 865-880.	3.3	3
47	Thinking about Spaceâ€Time Connections: Spatiotemporal Scheduling of Individual Activities. Transactions in GIS, 2013, 17, 791-807.	2.3	10
48	How you move reveals who you are: understanding human behavior by analyzing trajectory data. Knowledge and Information Systems, 2013, 37, 331-362.	3.2	116
49	Agent Based Modeling of Moving Point Objects in Geospatial Data. , 2013, , .		1
50	Space Transformation for Understanding Group Movement. IEEE Transactions on Visualization and Computer Graphics, 2013, 19, 2169-2178.	4.4	47
51	A review of quantitative methods for movement data. International Journal of Geographical Information Science, 2013, 27, 292-318.	4.8	153
52	Visualizing Interchange Patterns in Massive Movement Data. Computer Graphics Forum, 2013, 32, 271-280.	3.0	70
53	Time-lag method for detecting following and leadership behavior of pedestrians from mobile sensing data. , 2013, , .		28
54	Algorithms for hotspot computation on trajectory data. , 2013, , .		13
56	Mining frequent trajectory pattern based on vague space partition. Knowledge-Based Systems, 2013, 50, 100-111.	7.1	34

#	Article	IF	CITATIONS
57	Mining group movement patterns. , 2013, , .		4
58	Interactive exploration of movement data: A case study of geovisual analytics for fishing vessel analysis. Information Visualization, 2013, 12, 65-84.	1.9	16
59	Visual Analysis of Mobility Data. , 2013, , .		4
60	Qualitative Spatial Structure in Complex Areal Objects Using Location-Free, Mobile Geosensor Networks. , 2013, , .		3
61	A parallel GPU-based approach for reporting flock patterns. International Journal of Geographical Information Science, 2014, 28, 1877-1903.	4.8	9
62	What can spatial collectives tell us about their environment?. , 2014, , .		0
63	Indoor Location-Based Services. , 2014, , .		40
64	From Movement Data to Objects Behavior Using Semantic Trajectory and Semantic Events. Marine Geodesy, 2014, 37, 126-144.	2.0	17
65	Classifying pedestrian movement behaviour from GPS trajectories using visualization and clustering. Annals of GIS, 2014, 20, 85-98.	3.1	33
66	Identification of V-Formations and Circular and Doughnut Formations in a Set of Moving Entities with Outliers. Abstract and Applied Analysis, 2014, 2014, 1-11.	0.7	Ο
67	Comparative Eye Tracking Study on Node-Link Visualizations of Trajectories. IEEE Transactions on Visualization and Computer Graphics, 2014, 20, 2221-2230.	4.4	24
68	Extracting stay regions with uncertain boundaries from GPS trajectories. , 2014, , .		20
69	Ranking tourist attractions using time series GPS data of cabs. , 2014, , .		3
70	A Semantic Model for Movement Data Warehouses. , 2014, , .		19
71	Visualizing Proximityâ€Based Spatiotemporal Behavior of Museum Visitors using Tangram Diagrams. Computer Graphics Forum, 2014, 33, 261-270.	3.0	13
72	Feature-based automatic identification of interesting data segments in group movement data. Information Visualization, 2014, 13, 190-212.	1.9	16
73	Group spatiotemporal pattern queries. GeoInformatica, 2014, 18, 699-746.	2.7	18
74	Computing and visualizing popular places. Knowledge and Information Systems, 2014, 40, 411-437.	3.2	5

ARTICLE IF CITATIONS # <scp>CONSTAnT</scp> – A Conceptual Data Model for Semantic Trajectories of Moving Objects. 2.3 99 75 Transactions in GIS, 2014, 18, 66-88. An Ontology-Based Approach to Represent Trajectory Characteristics., 2014, , . Frequent Pattern Mining., 2014,,. 77 213 Tool support for detection and analysis of following and leadership behavior of pedestrians from mobile sensing data. Pervasive and Mobile Computing, 2014, 10, 104-117. Movement Pattern Analysis Based on Sequence Signatures. ISPRS International Journal of 79 2.9 2 Geo-Information, 2015, 4, 1605-1626. Developing and Integrating Advanced Movement Features Improves Automated Classification of Ciliate Species. PLoS ONE, 2015, 10, e0145345. 2.5 MigrO., 2015,,. 81 5 Special Issue on Spatio-Temporal Theories and Models for Environmental, Urban and Social Sciences: 1.2 Where Do We Stand?. Spatial Cognition and Computation, 2015, 15, 61-67. Cartographic visualization of human trajectory data: overview and analysis. Journal of Location 83 1.9 12 Based Services, 2015, 9, 138-166. Spatiotemporal Frequent Pattern Mining on Solar Data: Current Algorithms and Future Directions., 84 2015, , . The Impact of Interactivity on Comprehending 2D and 3D Visualizations of Movement Data. IEEE 52 85 4.4Transactions on Visualization and Computer Graphics, 2015, 21, 122-135. SimpliFly: A Methodology for Simplification and Thematic Enhancement of Trajectories. IEEE 86 4.4 Transactions on Visualization and Computer Graphics, 2015, 21, 107-121. A time geographic approach for delineating areas of sustained wildlife use. Annals of GIS, 2015, 21, 87 3.1 6 81-90. Seasonal fluctuation of riverine navigation and accessibility in Western Amazonia: An analysis combining aÂcost-efficient GPS-basedÂobservation system and interviews. Applied Geography, 2015, 63, 3.7 273-282 The Baquara2 knowledge-based framework for semantic enrichment and analysis of movement data. 89 59 3.4 Data and Knowledge Engineering, 2015, 98, 104-122. Creating Spatiotemporal Semantic Maps from Web Text Documents., 2015, , 157-174. 91 CEP-traj: An event-based solution to process trajectory data. Information Systems, 2015, 52, 34-54. 3.6 17 Large-scale taxi O/D visual analytics for understanding metropolitan human movement patterns. 1.8 34 Journal of Visualization, 2015, 18, 185-200.

#	ARTICLE	IF	Citations
93	Visual analytics for movement behavior in traffic and transportation. IBM Journal of Research and Development, 2015, 59, 10:1-10:12.	3.1	5
94	A description logic based QSTR framework for recognizing motion patterns from spatio-temporal data. , 2015, , .		1
95	Semantic enrichment and analysis of movement data. SIGSPATIAL Special, 2015, 7, 11-18.	2.7	4
96	Probabilistic model to predict movement pattern in geospatial data. , 2015, , .		1
97	Analyzing Animal Movement Characteristics From Location Data. Transactions in GIS, 2015, 19, 516-534.	2.3	5
98	Space-Time Integration in Geography and GIScience. , 2015, , .		11
99	Semantic management of moving objects: A vision towards smart mobility. Expert Systems With Applications, 2015, 42, 1418-1435.	7.6	46
100	Extensional and intensional collectives and the de re/de dicto distinction. Applied Ontology, 2016, 11, 205-226.	2.0	6
101	Computational Streetscapes. Computation, 2016, 4, 37.	2.0	14
102	What is an Appropriate Temporal Sampling Rate to Record Floating Car Data with a GPS?. ISPRS International Journal of Geo-Information, 2016, 5, 1.	2.9	60
103	Extracting Stops from Noisy Trajectories: A Sequence Oriented Clustering Approach. ISPRS International Journal of Geo-Information, 2016, 5, 29.	2.9	31
104	GIS and Transport Modeling—Strengthening the Spatial Perspective. ISPRS International Journal of Geo-Information, 2016, 5, 84.	2.9	42
105	Recognition of Repetitive Movement Patterns—The Case of Football Analysis. ISPRS International Journal of Geo-Information, 2016, 5, 208.	2.9	10
106	Using Crowdsourced Trajectories for Automated OSM Data Entry Approach. Sensors, 2016, 16, 1510.	3.8	18
107	Solving Large Scale Learning Tasks. Challenges and Algorithms. Lecture Notes in Computer Science, 2016, , .	1.3	5
108	Evaluating GPS sampling rates for pedestrian assistant systems. Journal of Location Based Services, 2016, 10, 212-239.	1.9	6
109	Insights into feral goat movement in Australia using dynamic Brownian Bridges for movement analysis. Rangeland Journal, 2016, 38, 343.	0.9	3
110	A survey of people movement analytics studies in the context of smart cities. , 2016, , .		10

#	Article	IF	CITATIONS
111	Quality assessment of OpenStreetMap data using trajectory mining. Geo-Spatial Information Science, 2016, 19, 56-68.	5.3	52
112	Spatio-Temporal Data Stream Clustering. SpringerBriefs in Computer Science, 2016, , 71-103.	0.2	2
113	Path segmentation for beginners: an overview of current methods for detecting changes in animal movement patterns. Movement Ecology, 2016, 4, 21.	2.8	145
114	Director's Cut: Analysis and Annotation of Soccer Matches. IEEE Computer Graphics and Applications, 2016, 36, 50-60.	1.2	43
116	Spatio-Temporal Data Streams. SpringerBriefs in Computer Science, 2016, , .	0.2	10
117	Conflict in Pedestrian Networks. Lecture Notes in Geoinformation and Cartography, 2016, , 261-278.	1.0	3
118	Understanding movement data quality. Journal of Location Based Services, 2016, 10, 31-46.	1.9	28
119	Analysis of movement data. International Journal of Geographical Information Science, 2016, 30, 825-834.	4.8	63
120	Detecting avoidance behaviors between moving object trajectories. Data and Knowledge Engineering, 2016, 102, 22-41.	3.4	7
121	Introducing â€~presence' and â€~stationarity index' to study partial migration patterns: an application of a spatio-temporal clustering technique. International Journal of Geographical Information Science, 2016, 30, 907-928.	4.8	21
122	Decentralized detection and monitoring of convoy patterns. International Journal of Geographical Information Science, 2016, 30, 993-1011.	4.8	5
123	Visualization, Selection, and Analysis of Traffic Flows. IEEE Transactions on Visualization and Computer Graphics, 2016, 22, 379-388.	4.4	59
124	A framework for models of movement in geographic space. International Journal of Geographical Information Science, 2016, 30, 970-992.	4.8	13
125	An on-line algorithm for cluster detection of mobile nodes through complex event processing. Information Systems, 2017, 64, 303-320.	3.6	4
126	Context-awareness in similarity measures and pattern discoveries of trajectories: a context-based dynamic time warping method. GIScience and Remote Sensing, 2017, 54, 426-452.	5.9	26
128	Design and evaluation of line symbolizations for origin–destination flow maps. Information Visualization, 2017, 16, 309-331.	1.9	26
129	Interactive exploration of ligand transportation through protein tunnels. BMC Bioinformatics, 2017, 18, 22.	2.6	10
131	Survey of Surveys (SoS) ―Mapping The Landscape of Survey Papers in Information Visualization. Computer Graphics Forum, 2017, 36, 589-617.	3.0	56

#	Article	IF	CITATIONS
132	Visualizing museum visitors' behavior: Where do they go and what do they do there?. Personal and Ubiquitous Computing, 2017, 21, 313-326.	2.8	47
133	Barrenâ€ground caribou (<i>Rangifer tarandus groenlandicus</i>) behaviour after recent fire events; integrating caribou telemetry data with Landsat fire detection techniques. Global Change Biology, 2017, 23, 1036-1047.	9.5	21
134	Mobility Genomeâ,,¢- A Framework for Mobility Intelligence from Large-Scale Spatio-Temporal Data. , 2017, , .		3
135	Animated maps for analysis of personal performance in games. , 2017, , .		2
136	Discovering Gatherings Based on Individual Mobility Patterns: Challenges and Direction. , 2017, , .		0
137	How They Move Reveals What Is Happening: Understanding the Dynamics of Big Events from Human Mobility Pattern. ISPRS International Journal of Geo-Information, 2017, 6, 15.	2.9	6
138	Privacy-preserving trajectory classification of driving trip data based on pattern discovery techniques. , 2017, , .		2
139	Parallel cluster analysis of multi city congestion based on spatial temporal potential correction in mobile phone APP. International Journal of Reasoning-based Intelligent Systems, 2017, 9, 130.	0.1	0
140	Challenges for social flows. Computers, Environment and Urban Systems, 2018, 70, 197-207.	7.1	24
141	Using interactions and dynamics for mining groups of moving objects from trajectory data. International Journal of Geographical Information Science, 2018, 32, 1436-1468.	4.8	7
142	Testing time-geographic density estimation for home range analysis using an agent-based model of animal movement. International Journal of Geographical Information Science, 2018, 32, 1505-1522.	4.8	17
143	Changing northern vegetation conditions are influencing barren ground caribou (<i>Rangifer) Tj ETQq1 1 0.7843</i>	14.rgBT /0	Overlock 10 T
144	A Personalized Location-Based and Serendipity-Oriented Point of Interest Recommender Assistant Based on Behavioral Patterns. Lecture Notes in Geoinformation and Cartography, 2018, , 271-289.	1.0	9
145	Cluster-based trajectory segmentation with local noise. Data Mining and Knowledge Discovery, 2018, 32, 1017-1055.	3.7	16
146	Making tourist guidance systems more intelligent, adaptive and personalised using crowd sourced movement data. Journal of Ambient Intelligence and Humanized Computing, 2018, 9, 413-427.	4.9	14
147	Contextâ€∎ware movement analytics: implications, taxonomy, and design framework. Wiley Interdisciplinary Reviews: Data Mining and Knowledge Discovery, 2018, 8, e1233.	6.8	15
148	Analytics of movement through checkpoints. International Journal of Geographical Information Science, 2018, 32, 1282-1303.	4.8	11
149	Geospatial IoT—The Need for Event-Driven Architectures in Contemporary Spatial Data Infrastructures. ISPRS International Journal of Geo-Information, 2018, 7, 385.	2.9	25

		CITATION REPORT		
#	Article		IF	CITATIONS
150	A Semantic Model for Human Mobility in an Urban Region. Journal on Data Semantics,	2018, 7, 171-187.	2.0	8
151	Contextual Analysis of Spatio-Temporal Walking Observations. Lecture Notes in Comp 2018, , 461-471.	uter Science,	1.3	1
152	Analysis and Modeling of Movement. , 2018, , 162-180.			3
153	Space-Time GIS and Its Evolution. , 2018, , 287-302.			2
154	Deriving Animal Movement Behaviors Using Movement Parameters Extracted from Loc International Journal of Geo-Information, 2018, 7, 78.	ation Data. ISPRS	2.9	16
155	Once upon a Spacetime: Visual Storytelling in Cognitive and Geotemporal Information International Journal of Geo-Information, 2018, 7, 96.	Spaces. ISPRS	2.9	15
156	A Geometric Framework for Detection of Critical Points in a Trajectory Using Convex H International Journal of Geo-Information, 2018, 7, 14.	ulls. ISPRS	2.9	4
157	Spatio-Temporal Data Mining. ACM Computing Surveys, 2019, 51, 1-41.		23.0	270
158	Discovering Frequent Movement Paths From Taxi Trajectory Data Using Spatially Embe and Association Rules. IEEE Transactions on Intelligent Transportation Systems, 2019,	dded Networks 20, 855-866.	8.0	41
159	Towards a comprehensive set of GPS-based indicators reflecting the multidimensional mobility for applications in health and aging research. International Journal of Health G 2019, 18, 17.	nature of daily eographics,	2.5	51
160	Routeâ€Aware Edge Bundling for Visualizing Originâ€Destination Trails in Urban Traffic Graphics Forum, 2019, 38, 581-593.	c. Computer	3.0	12
161	Learning anytime, anywhere: a spatio-temporal analysis for online learning. Interactive Environments, 2022, 30, 34-48.	Learning	6.4	18
162	Smart Car Based on Open MV Vision System. IOP Conference Series: Earth and Enviror 2019, 310, 032054.	nmental Science,	0.3	1
163	Construction of Semantic Annotation Framework for Stacked Trajectory Model. , 2019), , .		1
164	DG2CEP: a near real-time on-line algorithm for detecting spatial clusters large data stre complex event processing. Journal of Internet Services and Applications, 2019, 10, .	ams through	2.1	5
165	Revealing Spatial-Temporal Characteristics and Patterns of Urban Travel: A Large-Scale Visualization Study with Taxi GPS Data. ISPRS International Journal of Geo-Information	Analysis and , 2019, 8, 257.	2.9	28
166	Path segmentation for movement trajectories with irregular sampling frequency using interpolation and densityâ€based spatial clustering. Transactions in GIS, 2019, 23, 558		2.3	4
167	Key Concepts of Group Pattern Discovery Algorithms from Spatio-Temporal Trajectorie	s.,2019,,.		0

#	ARTICLE Geoinformatik. Springer Reference Naturwissenschaften, 2019, , .	IF 0.2	CITATIONS
169	Using time-series similarity measures to compare animal movement trajectories in ecology. Behavioral Ecology and Sociobiology, 2019, 73, 1.	1.4	41
170	Exodus 2.0: crowdsourcing geographical and social trails of mass migration. Journal of Geographical Systems, 2019, 21, 161-187.	3.1	10
171	The measurement of interpersonal interactions with continuous spatiotemporal data: Application to a study of the effects of resource competition on racial group interactions. Behavior Research Methods, 2020, 52, 881-900.	4.0	5
172	Multiple-Aspect Analysis of Semantic Trajectories. Lecture Notes in Computer Science, 2020, , .	1.3	1
173	Detecting regional dominant movement patterns in trajectory data with a convolutional neural network. International Journal of Geographical Information Science, 2020, 34, 996-1021.	4.8	5
174	Data Comets: Designing a Visualization Tool for Analyzing Autonomous Aerial Vehicle Logs with Grounded Evaluation. Computer Graphics Forum, 2020, 39, 455-468.	3.0	2
175	An analysis of movement patterns in mass casualty incident simulations. Advances in Simulation, 2020, 5, 27.	2.3	3
176	<scp>moveVis</scp> : Animating movement trajectories in synchronicity with static or temporally dynamic environmental data in <scp>r</scp> . Methods in Ecology and Evolution, 2020, 11, 664-669.	5.2	15
177	Fishing Vessels Behavior Identification for Combating IUU Fishing: Enable Traceability at Sea. Wireless Personal Communications, 2020, 115, 2971-2993.	2.7	23
178	Detecting Pattern Changes in Individual Travel Behavior from Vehicle GPS/GNSS Data. Sensors, 2020, 20, 2295.	3.8	6
179	Analysis of temporal patterns in animal movement networks. Methods in Ecology and Evolution, 2021, 12, 101-113.	5.2	21
180	A Data Science Framework for Movement. Geographical Analysis, 2021, 53, 92-112.	3.5	23
181	A method to identify defensive assignments in team-based invasion sports using spatiotemporal trajectories. International Journal of Geographical Information Science, 2021, 35, 741-762.	4.8	1
182	SCPP. ACM Transactions on Spatial Algorithms and Systems, 2021, 7, 1-30.	1.4	1
183	Establishing the integrated science of movement: bringing together concepts and methods from animal and human movement analysis. International Journal of Geographical Information Science, 2021, 35, 1273-1308.	4.8	22
184	Beyond Objects in Space-Time: Towards a Movement Analysis Framework with â€~How' and â€~Why' Elements. ISPRS International Journal of Geo-Information, 2021, 10, 190.	2.9	2
185	Mapping trajectories and flows: facilitating a human-centered approach to movement data analytics. Cartography and Geographic Information Science, 2021, 48, 353-375.	3.0	7

#	Article	IF	CITATIONS
186	Visual Analysis of Spatioâ€ŧemporal Phenomena with 1D Projections. Computer Graphics Forum, 2021, 40, 335-347.	3.0	5
187	Design Space of Originâ€Destination Data Visualization. Computer Graphics Forum, 2021, 40, 323-334.	3.0	8
188	ORTEGA: An object-oriented time-geographic analytical approach to trace space-time contact patterns in movement data. Computers, Environment and Urban Systems, 2021, 88, 101630.	7.1	12
189	Context-aware movement analysis in ecology: a systematic review. International Journal of Geographical Information Science, 2022, 36, 405-427.	4.8	9
190	Sequential movement pattern-mining (SMP) in field-based team-sport: A framework for quantifying spatiotemporal data and improve training specificity?. Journal of Sports Sciences, 2022, 40, 164-174.	2.0	5
191	On a clustering-based mining approach with labeled semantics for significant place discovery. Information Sciences, 2021, 578, 37-63.	6.9	7
192	Trajectory Pattern Mining. , 2011, , 143-177.		36
193	Exploratory Visualization of Collective Mobile Objects Data Using Temporal Granularity and Spatial Similarity. , 2014, , 127-154.		3
194	A Geo-ontology Design Pattern for Semantic Trajectories. Lecture Notes in Computer Science, 2013, , 438-456.	1.3	60
196	Assessing the Influence of Preprocessing Methods on Raw GPS-Data for Automated Change Point Detection. Lecture Notes in Geoinformation and Cartography, 2014, , 123-139.	1.0	1
197	Spatiotemporal Pattern Mining: Algorithms and Applications. , 2014, , 283-306.		13
198	Computational Movement Analysis. SpringerBriefs in Computer Science, 2014, , .	0.2	44
199	On Event Detection from Spatial Time Series for Urban Traffic Applications. Lecture Notes in Computer Science, 2016, , 221-233.	1.3	10
200	A Heuristic Approach for On-line Discovery of Unidentified Spatial Clusters from Grid-Based Streaming Algorithms. Lecture Notes in Computer Science, 2016, , 128-142.	1.3	1
202	The Endpoint Hypothesis: A Topological-Cognitive Assessment of Geographic Scale Movement Patterns. Lecture Notes in Computer Science, 2009, , 177-194.	1.3	20
203	The Space–Time Aquarium is Full of Albatrosses: Time Geography, Lifestyle and Trans-species Geovisual Analytics. Lecture Notes in Geoinformation and Cartography, 2013, , 235-260.	1.0	4
204	Privacy Issues in Geospatial Visual Analytics. Lecture Notes in Geoinformation and Cartography, 2012, , 239-246.	1.0	13
205	Geographic Information Science as a Common Cause for Interdisciplinary Research. Lecture Notes in Geoinformation and Cartography, 2012, , 411-427.	1.0	3

#	Article	IF	Citations
207	Creating Perceptually Salient Animated Displays of Spatiotemporal Coordination in Events. Lecture Notes in Geoinformation and Cartography, 2013, , 259-270.	1.0	10
208	Interpreting Pedestrian Behaviour by Visualising and Clustering Movement Data. Lecture Notes in Computer Science, 2013, , 64-81.	1.3	1
209	Transformations of Movement Data. , 2013, , 73-101.		2
210	Space-Time Analytics of Tracks for the Understanding of Patterns of Life. , 2015, , 373-398.		10
211	A Comparison of Geographical Propagation Visualizations. , 2020, , .		9
212	Dandelion Diagram: Aggregating Positioning and Orientation Data in the Visualization of Classroom Proxemics. , 2020, , .		4
213	Estimating changes in lichen mat volume through time and related effects on barren ground caribou (Rangifer tarandus groenlandicus) movement. PLoS ONE, 2017, 12, e0172669.	2.5	12
214	MovingPandas: Efficient Structures for Movement Data in Python. GI_Forum, 0, 1, 54-68.	0.2	33
215	Developing an Interactions Ontology for Characterising Pedestrian Movement Behaviour. , 0, , 62-86.		8
216	Spatiotemporal Data Mining: Issues, Tasks And Applications. International Journal of Computer Science & Engineering Survey, 2012, 3, 39-52.	0.3	38
217	A WEB-BASED PLATFORM FOR VISUALIZING SPATIOTEMPORAL DYNAMICS OF BIG TAXI DATA. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XLII-2/W7, 1407-1412.	0.2	2
218	Integrating cross-scale analysis in the spatial and temporal domains for classification of behavioral movement. Journal of Spatial Information Science, 2014, , .	1.2	14
219	Similarity of trajectories taking into account geographic context. Journal of Spatial Information Science, 2014, , .	1.2	18
222	A Taxonomy for Heavy-Duty Telemanipulation Tasks Using Elemental Actions. International Journal of Advanced Robotic Systems, 2013, 10, 371.	2.1	3
223	A framework for monitoring movements of pandemic disease patients based on GPS trajectory datasets. Wireless Networks, 2022, 28, 1-28.	3.0	3
224	A Unified Taxonomy and Multimodal Dataset for Events in Invasion Games. , 2021, , .		9
225	Modeling Spatiotemporal Paths for Single Moving Objects. Lecture Notes in Geoinformation and Cartography, 2009, , 151-167.	1.0	0
226	To Approach Cylindrical Coordinates to Represent Multivariable Spatio-temporal Data. Lecture Notes in Computer Science, 2012, , 21-28.	1.3	0

#	Article	IF	Citations
228	An Approach to Representing Movement Data. International Journal of Information and Electronics Engineering, 2013, , .	0.2	4
229	Discussion and Outlook. , 2013, , 335-376.		0
230	Movement Mining. SpringerBriefs in Computer Science, 2014, , 29-58.	0.2	0
233	Computer-gestützte Bewegungsanalyse. , 2016, , 1-28.		0
234	TOWARDS THE DEVELOPMENT OF A TAXONOMY FOR VISUALISATION OF STREAMED GEOSPATIAL DATA. ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences, 0, III-2, 129-136.	0.0	0
236	Evaluating Spatio-temporal Data Models for Trajectories in PostGIS Databases. GI_Forum, 0, 1, 16-33.	0.2	5
237	Un modèle spatiotemporel sémantique pour la modélisation de mobilités en milieu urbain. Revue Internationale De Géomatique, 2018, 28, 311-338.	0.1	0
238	Computer-gestützte Bewegungsanalyse. Springer Reference Naturwissenschaften, 2019, , 157-184.	0.2	0
239	Intersection-based Spatial Annotation of Trajectories with Linked Data. , 0, , .		0
241	Augmenting a Description Logic withÂProbability for Motion Patterns Within QSTR. Advances in Intelligent Systems and Computing, 2020, , 157-167.	0.6	0
242	Spatio-temporal clustering benchmark for collective animal behavior. , 2021, , .		4
243	EvolvingClusters: Online Discovery of Group Patterns in Enriched Maritime Data. Lecture Notes in Computer Science, 2020, , 50-65.	1.3	1
244	Unified Rule Approach and the Semantic Enrichment of Economic Movement Data. Advances in Geospatial Technologies Book Series, 0, , 229-247.	0.2	0
245	StABLE: Analyzing Player Movement Similarity Using Text Mining. , 2021, , .		1
246	Differentiating geographic movement described in text documents. Transactions in GIS, 0, , .	2.3	1
247	Analyzing Trajectory Gaps to Find Possible Rendezvous Region. ACM Transactions on Intelligent Systems and Technology, 2022, 13, 1-23.	4.5	3
248	Understanding the impact of temporal scale on human movement analytics. Journal of Geographical Systems, 2022, 24, 353-388.	3.1	3
249	Indoor Location Data for Tracking Human Behaviours: A Scoping Review. Sensors, 2022, 22, 1220.	3.8	12

#	Article	IF	CITATIONS
250	Semantic Trajectory Analytics and Recommender Systems in Cultural Spaces. Big Data and Cognitive Computing, 2021, 5, 80.	4.7	8
251	Analysis of the relationship between fine-grained daily spatial and temporal activity frequency and academic performance. , 2021, , .		0
252	Towards Multimodal Search and Visualization of Movies Based on Emotions. , 2022, , .		2
253	A Generalized Model of Activity Space. Annals of the American Association of Geographers, 2022, 112, 2212-2229.	2.2	3
254	A graph based approach for mining significant places in trajectory data. Information Sciences, 2022, 609, 172-194.	6.9	3
255	Geo-Storylines: Integrating Maps Into Storyline Visualizations. IEEE Transactions on Visualization and Computer Graphics, 2022, , 1-11.	4.4	2
256	Towards a tighter bound on possible-rendezvous areas. , 2022, , .		1
257	A deep encoder-decoder network for anomaly detection in driving trajectory behavior under spatio-temporal context. International Journal of Applied Earth Observation and Geoinformation, 2022, 115, 103115.	1.9	5
258	Towards Moving Objects Behavior Analysis: Region Speed Limit Rate Measure. Informatics, 2023, 10, 15.	3.9	0
259	Assessing the cognition of movement trajectory visualizations: interpreting speed and direction. Cartography and Geographic Information Science, 2023, 50, 143-161.	3.0	0
260	A conceptual framework for developing dashboards for big mobility data. Cartography and Geographic Information Science, 0, , 1-20.	3.0	2
261	Ranking Spatial Units with Structural Property and Traffic Distributions for Uncovering Spatial Interaction Patterns in a City. Geographical Analysis, 2024, 56, 3-25.	3.5	0
262	Density Approximation forÂMoving Groups. Lecture Notes in Computer Science, 2023, , 675-688.	1.3	0
263	Phase-Type Distributions of Animal Trajectories with Random Walks. Mathematics, 2023, 11, 3671.	2.2	0
264	Body in motion, attention in focus: A virtual reality study on teachers' movement patterns and noticing. Computers and Education, 2023, 206, 104912.	8.3	0
265	LiberRoad: Probing into the Journey of Chinese Classics through Visual Analytics. IEEE Transactions on Visualization and Computer Graphics, 2023, , 1-11.	4.4	0
266	Visualizing Maps of Visitors' Interest for Museum Exhibits with Single-Board Computers. , 2023, , .		0
267	Analyzing Semantically Enriched Trajectories. KI - Kunstliche Intelligenz, 0, , .	3.2	0

#	Article	IF	CITATIONS
268	method for estimating the position and direction of a leader of a set of moving objects. Revista Facultad De IngenierAa, 2012, , 11-20.	0.5	0