

Jonathan Sprinkle

List of Publications by Year in descending order

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Version: 2024-02-01

96
papers

2,182
citations

706676

14
h-index

591227

27
g-index

101
all docs

101
docs citations

101
times ranked

1620
citing authors

#	ARTICLE	IF	CITATIONS
1	Experimental testing of a control barrier function on an automated vehicle in live multi-lane traffic. , 2022, , .		1
2	Strym: A Python Package for Real-time CAN Data Logging, Analysis and Visualization to Work with USB-CAN Interface. , 2022, , .		4
3	Data from the Development Evolution of a Vehicle for Custom Control. , 2022, , .		2
4	Repeatable & Scalable Multi-Vehicle Simulation with Offloaded Dynamics using Federated Modeling. , 2022, , .		0
5	Are Commercially Implemented Adaptive Cruise Control Systems String Stable?. IEEE Transactions on Intelligent Transportation Systems, 2021, 22, 6992-7003.	4.7	117
6	Libpanda. , 2021, , .		8
7	Challenges in set-valued model-predictive control. , 2021, , .		1
8	From CAN to ROS. , 2021, , .		6
9	Integrated Framework of Vehicle Dynamics, Instabilities, Energy Models, and Sparse Flow Smoothing Controllers. , 2021, , .		8
10	CAN coach. , 2021, , .		5
11	Safer adaptive cruise control for traffic wave dampening. , 2021, , .		0
12	Reachability Analysis for FollowerStopper: Safety Analysis and Experimental Results. , 2021, , .		0
13	Set-Valued Model Predictive Control. , 2021, , .		1
14	Automated Model-Based Optimization of Data-Adaptable Embedded Systems. Transactions on Embedded Computing Systems, 2020, 19, 1-22.	2.1	1
15	Tracking vehicle trajectories and fuel rates in phantom traffic jams: Methodology and data. Transportation Research Part C: Emerging Technologies, 2019, 99, 82-109.	3.9	39
16	String stability of commercial adaptive cruise control vehicles. , 2019, , .		2
17	Real-time distance estimation and filtering of vehicle headways for smoothing of traffic waves. , 2019, , .		5
18	Quantifying air quality benefits resulting from few autonomous vehicles stabilizing traffic. Transportation Research, Part D: Transport and Environment, 2019, 67, 351-365.	3.2	79

#	ARTICLE	IF	CITATIONS
19	Feedback Control Algorithms for the Dissipation of Traffic Waves with Autonomous Vehicles. Springer Optimization and Its Applications, 2019, , 275-299.	0.6	18
20	A meta-metamodel for dynamic constraint feedback in modeling languages. , 2019, , .		1
21	Summary of the 17th ACM SIGPLAN international workshop on domain-specific modeling (DSM 2019). , 2019, , .		0
22	Dissipation of stop-and-go waves via control of autonomous vehicles: Field experiments. Transportation Research Part C: Emerging Technologies, 2018, 89, 205-221.	3.9	459
23	A LiDAR Error Model for Cooperative Driving Simulations. , 2018, , .		9
24	Dissipation of Emergent Traffic Waves in Stop-and-Go Traffic Using a Supervisory Controller. , 2018, , .		8
25	Task Transition Scheduling for Data-Adaptable Systems. Transactions on Embedded Computing Systems, 2017, 16, 1-28.	2.1	1
26	Fuzzy control of an autonomous car using a smart phone. , 2017, , .		3
27	Safe Control of Autonomous & Connected Vehicles (SCAV'17). Software Engineering Notes: an Informal Newsletter of the Special Interest Committee on Software Engineering / ACM, 2017, 42, 22-23.	0.5	2
28	A modular framework to enable rapid evaluation and exploration of energy management methods in smart home platforms. Energy Systems, 2016, 7, 215-235.	1.8	4
29	A safe autonomous vehicle trajectory domain specific modeling language for non-expert development. , 2016, , .		4
30	Model-Driven Optimization of Data-Adaptable Embedded Systems. , 2016, , .		0
31	Computationally Aware Switching Criteria for Hybrid Model Predictive Control of Cyber-Physical Systems. IEEE Transactions on Automation Science and Engineering, 2016, 13, 479-490.	3.4	15
32	Experience report: constraint-based modeling of autonomous vehicle trajectories. , 2015, , .		3
33	Workshop preview of the 15th workshop on domain specific modeling (DSM 2015). , 2015, , .		0
34	Computationally aware control of autonomous vehicles: a hybrid model predictive control approach. Autonomous Robots, 2015, 39, 503-517.	3.2	19
35	A Data-Driven Linear Approximation of HVAC Utilization for Predictive Control and Optimization. IEEE Transactions on Control Systems Technology, 2015, 23, 778-786.	3.2	13
36	A hybrid model predictive controller for path planning and path following. , 2015, , .		13

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37	Motorized Mobility Scooters: The Use of Training/Intervention and Technology for Improving Driving Skills in Aging Adults - A Mini-Review. Gerontology, 2014, 60, 357-365.	1.4	13
38	A hybrid controller for autonomous vehicle lane changing with epsilon dragging. , 2014, , .		3
39	A Closed-loop Model-based Design Approach based on Automatic Verification and Transformation. , 2014, , .		3
40	Generating Model Transformations for Mending Dynamic Constraint Violations in Cyber Physical Systems. , 2014, , .		2
41	DSM'14. , 2014, , .		0
42	How You Can Learn to Stop Worrying and Love Reconfigurable Embedded Systems: A Tutorial. , 2013, , .		0
43	Model-Based Software Synthesis for Self-Reconfigurable Sensor Network in Water Monitoring. , 2013, , .		2
44	System Throughput Optimization and Runtime Communication Middleware Supporting Dynamic Software-Hardware Task Migration in Data Adaptable Embedded Systems. , 2013, , .		3
45	Mobile Device Software: Model-Based Architectures and Examples. , 2013, , .		0
46	Generating a ROS/JAUS bridge for an autonomous ground vehicle. , 2013, , .		6
47	Efficient reconfiguration methods to enable rapid deployment of runtime reconfigurable systems. , 2013, , .		1
48	Model Based Development with the Skeleton Design Method. , 2013, , .		3
49	Modeling Autonomous Systems. Journal of Aerospace Information Systems, 2013, 10, 396-413.	1.0	2
50	Runtime hardware/software task transition scheduling for data-adaptable embedded systems. , 2013, , .		4
51	Summary of the 6th International Workshop on Models and Evolution (ME 2012). , 2012, , .		0
52	Heterogeneous multi-core systems. , 2012, , .		1
53	The 12th workshop on domain-specific modeling. , 2012, , .		0
54	Acomni. , 2012, , .		0

#	ARTICLE	IF	CITATIONS
55	An overseer control methodology for data adaptable embedded systems. , 2012, , .		2
56	Summary of the 6th International Workshop on Multi-Paradigm Modeling (MPM'12). , 2012, , .		1
57	A passenger comfort controller for an autonomous ground vehicle. , 2012, , .		9
58	Reachability Calculations for Vehicle Safety During Manned/Unmanned Vehicle Interaction. Journal of Guidance, Control, and Dynamics, 2012, 35, 138-152.	1.6	22
59	Switched and Symmetric Pursuit/Evasion Games Using Online Model Predictive Control With Application to Autonomous Aircraft. IEEE Transactions on Control Systems Technology, 2012, 20, 604-620.	3.2	56
60	On the Extraction and Analysis of a Social Network with Partial Organizational Observation. , 2012, , .		1
61	Automated Software Generation and Hardware Coprocessor Synthesis for Data-Adaptable Reconfigurable Systems. , 2012, , .		10
62	Summary of the Second International Workshop on Models and Evolution. Lecture Notes in Computer Science, 2012, , 244-245.	1.0	0
63	On the Mitigation of MultiCore-Induced Behavioral Deviations of an Autonomous Ground Vehicle. , 2011, , .		0
64	Modeling of Data Adaptable Reconfigurable Embedded Systems. , 2011, , .		6
65	Simplification of Semantically-Rich Model Transformations through Generated Transformation Blocks. , 2011, , .		0
66	Hardware/Software Communication Middleware for Data Adaptable Embedded Systems. , 2011, , .		5
67	Message Modeling for the Joint Architecture for Unmanned Systems (JAUS). , 2011, , .		5
68	Time-triggered buffers for event-based middleware systems. Innovations in Systems and Software Engineering, 2011, 7, 9-22.	1.6	4
69	autoVHDL. , 2011, , .		0
70	Teaching students to learn to learn mobile phone programming. , 2011, , .		1
71	The 11th workshop on domain-specific modeling. , 2011, , .		0
72	The 11th workshop on domain-specific modeling. , 2011, , .		0

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73	Simulator Development for Transition Flight Dynamics of a VTOL MAV. International Journal of Micro Air Vehicles, 2010, 2, 69-89.	1.0	10
74	Analysis of a metamodel to estimate complexity of using a domain-specific language. , 2010, , .		3
75	The 10th workshop on domain-specific modeling. , 2010, , .		0
76	UAV Search: Maximizing Target Acquisition. , 2010, , .		10
77	Modeling Languages Applied to Decision Controllers for Embedded Human Systems. , 2010, , .		1
78	3 Metamodelling. Lecture Notes in Computer Science, 2010, , 57-76.	1.0	34
79	9 Model Evolution and Management. Lecture Notes in Computer Science, 2010, , 241-270.	1.0	10
80	The 9th OOPSLA workshop on domain-specific modeling. , 2009, , .		10
81	Model-based design: a report from the trenches of the DARPA Urban Challenge. Software and Systems Modeling, 2009, 8, 551-566.	2.2	15
82	Guest Editors' Introduction: What Kinds of Nails Need a Domain-Specific Hammer?. IEEE Software, 2009, 26, 15-18.	2.1	78
83	Automatic Control of VTOL Micro Air Vehicle During Transition Maneuver. , 2009, , .		10
84	Using Integrative Models in an Advanced Heterogeneous System Simulation. , 2009, , .		1
85	The 8th OOPSLA workshop on domain-specific modeling. , 2008, , .		1
86	Reachability calculations for automated aerial refueling. , 2008, , .		46
87	The 7th OOPSLA workshop on domain-specific modeling. , 2007, , .		5
88	Domain-Specific Modeling. Chapman & Hall/CRC Computer and Information Science Series, 2007, , 7-1-7-20.	0.4	38
89	The 6th OOPSLA workshop on domain-specific modeling. , 2006, , .		3
90	Online safety calculations for glide-slope recapture. Innovations in Systems and Software Engineering, 2005, 1, 157-175.	1.6	9

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91	Information Technology for Assisted Living at Home: building a wireless infrastructure for assisted living. , 2005, 2005, 3931-4.		41
92	Generative Components for Hybrid Systems Tools.. Journal of Object Technology, 2005, 4, 33.	0.8	2
93	A domain-specific visual language for domain model evolution. Journal of Visual Languages and Computing, 2004, 15, 291-307.	1.8	97
94	ANEMIC: Automatic Interface Enabler for Model Integrated Computing. Lecture Notes in Computer Science, 2003, , 138-150.	1.0	3
95	Composing domain-specific design environments. Computer, 2001, 34, 44-51.	1.2	690
96	The CAT Vehicle Testbed: A Simulator with Hardware in the Loop for Autonomous Vehicle Applications. Electronic Proceedings in Theoretical Computer Science, EPTCS, 0, 269, 32-47.	0.8	36