

David Parker

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/7890425/david-parker-publications-by-year.pdf>

Version: 2024-04-28

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

97
papers

4,079
citations

32
h-index

62
g-index

97
ext. papers

4,561
ext. citations

1.4
avg, IF

5.65
L-index

#	Paper	IF	Citations
97	Correlated Equilibria and Fairness in Concurrent Stochastic Games. <i>Lecture Notes in Computer Science</i> , 2022 , 60-78	0.9	
96	Verified Probabilistic Policies for Deep Reinforcement Learning. <i>Lecture Notes in Computer Science</i> , 2022 , 193-212	0.9	1
95	Quantitative verification of Kalman filters. <i>Formal Aspects of Computing</i> , 2021 , 33, 669-693	1.2	
94	Fault diagnosis in labelled Petri nets: A Fourier-Motzkin based approach. <i>Automatica</i> , 2021 , 132, 109831	5.7	4
93	On Correctness, Precision, and Performance in Quantitative Verification. <i>Lecture Notes in Computer Science</i> , 2021 , 216-241	0.9	9
92	ATEN: And/Or tree ensemble for inferring accurate Boolean network topology and dynamics. <i>Bioinformatics</i> , 2020 , 36, 578-585	7.2	1
91	PRISM-games 3.0: Stochastic Game Verification with Concurrency, Equilibria and Time. <i>Lecture Notes in Computer Science</i> , 2020 , 475-487	0.9	19
90	Probabilistic Guarantees for Safe Deep Reinforcement Learning. <i>Lecture Notes in Computer Science</i> , 2020 , 231-248	0.9	5
89	Multi-player Equilibria Verification for Concurrent Stochastic Games. <i>Lecture Notes in Computer Science</i> , 2020 , 74-95	0.9	5
88	Quantitative Verification of Certificate Transparency Gossip Protocols 2020 ,		2
87	Probabilistic planning with formal performance guarantees for mobile service robots. <i>International Journal of Robotics Research</i> , 2019 , 38, 1098-1123	5.7	21
86	Software Adaptation for an Unmanned Undersea Vehicle. <i>IEEE Software</i> , 2019 , 36, 91-96	1.5	5
85	Multi-scale stochastic organization-oriented coarse-graining exemplified on the human mitotic checkpoint. <i>Scientific Reports</i> , 2019 , 9, 3902	4.9	3
84	Variability management in safety-critical systems design and dependability analysis. <i>Journal of Software: Evolution and Process</i> , 2019 , 31, e2202	1	3
83	Automated Formal Analysis of Side-Channel Attacks on Probabilistic Systems. <i>Lecture Notes in Computer Science</i> , 2019 , 319-337	0.9	
82	The Quantitative Verification Benchmark Set. <i>Lecture Notes in Computer Science</i> , 2019 , 344-350	0.9	32
81	The 2019 Comparison of Tools for the Analysis of Quantitative Formal Models. <i>Lecture Notes in Computer Science</i> , 2019 , 69-92	0.9	27

80	Equilibria-Based Probabilistic Model Checking for Concurrent Stochastic Games. <i>Lecture Notes in Computer Science</i> , 2019 , 298-315	0.9	9
79	Quantitative Verification of Numerical Stability for Kalman Filters. <i>Lecture Notes in Computer Science</i> , 2019 , 425-441	0.9	1
78	Verification and Control of Turn-Based Probabilistic Real-Time Games. <i>Lecture Notes in Computer Science</i> , 2019 , 379-396	0.9	7
77	Online monitoring for diagnosis of violations of constraints in Petri net models. <i>IFAC-PapersOnLine</i> , 2019 , 52, 25-30	0.7	0
76	Organisation-Oriented Coarse Graining and Refinement of Stochastic Reaction Networks. <i>IEEE/ACM Transactions on Computational Biology and Bioinformatics</i> , 2018 , 15, 1152-1166	3	4
75	Performance modelling and verification of cloud-based auto-scaling policies. <i>Future Generation Computer Systems</i> , 2018 , 87, 629-638	7.5	19
74	PRISM-games: verification and strategy synthesis for stochastic multi-player games with multiple objectives. <i>International Journal on Software Tools for Technology Transfer</i> , 2018 , 20, 195-210	1.3	25
73	Automated Verification of Concurrent Stochastic Games. <i>Lecture Notes in Computer Science</i> , 2018 , 223-239,		8
72	2018 ,		1
71	Performance Modelling and Verification of Cloud-Based Auto-Scaling Policies 2017 ,		7
70	Verification and control of partially observable probabilistic systems. <i>Real-Time Systems</i> , 2017 , 53, 354-402	0.9	27
69	Ensuring the Reliability of Your Model Checker: Interval Iteration for Markov Decision Processes. <i>Lecture Notes in Computer Science</i> , 2017 , 160-180	0.9	34
68	Symbolic Verification and Strategy Synthesis for Linearly-Priced Probabilistic Timed Automata. <i>Lecture Notes in Computer Science</i> , 2017 , 289-309	0.9	2
67	Synthesizing efficient systems in probabilistic environments. <i>Acta Informatica</i> , 2016 , 53, 425-457	0.9	5
66	Formal Quantitative Analysis of Reaction Networks Using Chemical Organisation Theory. <i>Lecture Notes in Computer Science</i> , 2016 , 232-251	0.9	7
65	PRISM-Games 2.0: A Tool for Multi-objective Strategy Synthesis for Stochastic Games. <i>Lecture Notes in Computer Science</i> , 2016 , 560-566	0.9	18
64	Can aquatic flightless birds allocate Automotive Safety requirements? 2015 ,		3
63	Permissive Controller Synthesis for Probabilistic Systems. <i>Logical Methods in Computer Science</i> , 2015 , 11,		7

62	The Hanoi Omega-Automata Format. <i>Lecture Notes in Computer Science</i> , 2015 , 479-486	0.9	46
61	Verification and Control of Partially Observable Probabilistic Real-Time Systems. <i>Lecture Notes in Computer Science</i> , 2015 , 240-255	0.9	5
60	Local abstraction refinement for probabilistic timed programs. <i>Theoretical Computer Science</i> , 2014 , 538, 37-53	1.1	3
59	Verification of Markov Decision Processes Using Learning Algorithms. <i>Lecture Notes in Computer Science</i> , 2014 , 98-114	0.9	91
58	Model checking for probabilistic timed automata. <i>Formal Methods in System Design</i> , 2013 , 43, 164-190	1.4	66
57	Automatic verification of competitive stochastic systems. <i>Formal Methods in System Design</i> , 2013 , 43, 61-92	1.4	69
56	2013 ,		16
55	Compositional probabilistic verification through multi-objective model checking. <i>Information and Computation</i> , 2013 , 232, 38-65	0.8	22
54	SMT-Based Bisimulation Minimisation of Markov Models. <i>Lecture Notes in Computer Science</i> , 2013 , 28-47	0.9	12
53	PRISM-games: A Model Checker for Stochastic Multi-Player Games. <i>Lecture Notes in Computer Science</i> , 2013 , 185-191	0.9	57
52	Design and analysis of DNA strand displacement devices using probabilistic model checking. <i>Journal of the Royal Society Interface</i> , 2012 , 9, 1470-85	4.1	58
51	The PRISM Benchmark Suite 2012 ,		69
50	Probabilistic verification of Herman's self-stabilisation algorithm. <i>Formal Aspects of Computing</i> , 2012 , 24, 661-670	1.2	24
49	Automatic Verification of Competitive Stochastic Systems. <i>Lecture Notes in Computer Science</i> , 2012 , 315-330	0.9	14
48	Pareto Curves for Probabilistic Model Checking. <i>Lecture Notes in Computer Science</i> , 2012 , 317-332	0.9	44
47	Engineering failure analysis and design optimisation with HiP-HOPS. <i>Engineering Failure Analysis</i> , 2011 , 18, 590-608	3.2	97
46	Incremental quantitative verification for Markov decision processes 2011 ,		36
45	Game-based Abstraction and Controller Synthesis for Probabilistic Hybrid Systems 2011 ,		12

44	PRISM 4.0: Verification of Probabilistic Real-Time Systems. <i>Lecture Notes in Computer Science</i> , 2011 , 585-591	0.9	51	953
43	Automated Learning of Probabilistic Assumptions for Compositional Reasoning. <i>Lecture Notes in Computer Science</i> , 2011 , 2-17	0.9		14
42	Quantitative Multi-objective Verification for Probabilistic Systems. <i>Lecture Notes in Computer Science</i> , 2011 , 112-127	0.9		52
41	Automated Verification Techniques for Probabilistic Systems. <i>Lecture Notes in Computer Science</i> , 2011 , 53-113	0.9		140
40	Verifying Team Formation Protocols with Probabilistic Model Checking. <i>Lecture Notes in Computer Science</i> , 2011 , 190-207	0.9		14
39	Learning-Based Compositional Verification for Synchronous Probabilistic Systems. <i>Lecture Notes in Computer Science</i> , 2011 , 511-521	0.9		17
38	Advances and challenges of probabilistic model checking 2010 ,			27
37	A Framework for Verification of Software with Time and Probabilities. <i>Lecture Notes in Computer Science</i> , 2010 , 25-45	0.9		5
36	Compositional Verification of Probabilistic Systems Using Learning 2010 ,			22
35	A game-based abstraction-refinement framework for Markov decision processes. <i>Formal Methods in System Design</i> , 2010 , 36, 246-280	1.4		62
34	Assume-Guarantee Verification for Probabilistic Systems. <i>Lecture Notes in Computer Science</i> , 2010 , 23-37	0.9		59
33	Probabilistic Mobile Ambients. <i>Theoretical Computer Science</i> , 2009 , 410, 1272-1303	1.1		17
32	Language-Level Symmetry Reduction for Probabilistic Model Checking 2009 ,			11
31	Model Checking Probabilistic and Stochastic Extensions of the π -Calculus. <i>IEEE Transactions on Software Engineering</i> , 2009 , 35, 209-223	3.5		16
30	Quantitative Verification Techniques for Biological Processes. <i>Natural Computing Series</i> , 2009 , 391-409	2.5		8
29	Bisimulation for Demonic Schedulers. <i>Lecture Notes in Computer Science</i> , 2009 , 318-332	0.9		7
28	Stochastic Games for Verification of Probabilistic Timed Automata. <i>Lecture Notes in Computer Science</i> , 2009 , 212-227	0.9		32
27	Symbolic Magnifying Lens Abstraction in Markov Decision Processes 2008 ,			3

26	Probabilistic model checking of complex biological pathways. <i>Theoretical Computer Science</i> , 2008 , 391, 239-257	1.1	110
25	Game-Based Probabilistic Predicate Abstraction in PRISM. <i>Electronic Notes in Theoretical Computer Science</i> , 2008 , 220, 5-21	0.7	13
24	Generating Compact MTBDD-Representations from Probmela Specifications. <i>Lecture Notes in Computer Science</i> , 2008 , 60-76	0.9	4
23	Abstraction Refinement for Probabilistic Software. <i>Lecture Notes in Computer Science</i> , 2008 , 182-197	0.9	32
22	GRIP: Generic Representatives in PRISM 2007 ,		6
21	Controller dependability analysis by probabilistic model checking. <i>Control Engineering Practice</i> , 2007 , 15, 1427-1434	3.9	34
20	Model checking the probabilistic pi-calculus 2007 ,		9
19	Quantitative Analysis With the Probabilistic Model Checker PRISM. <i>Electronic Notes in Theoretical Computer Science</i> , 2006 , 153, 5-31	0.7	60
18	Simulation and Verification for Computational Modelling of Signalling Pathways 2006 ,		13
17	Performance analysis of probabilistic timed automata using digital clocks. <i>Formal Methods in System Design</i> , 2006 , 29, 33-78	1.4	111
16	Numerical vs. statistical probabilistic model checking. <i>International Journal on Software Tools for Technology Transfer</i> , 2006 , 8, 216-228	1.3	117
15	A formal analysis of bluetooth device discovery. <i>International Journal on Software Tools for Technology Transfer</i> , 2006 , 8, 621-632	1.3	55
14	PRISM: A Tool for Automatic Verification of Probabilistic Systems. <i>Lecture Notes in Computer Science</i> , 2006 , 441-444	0.9	289
13	Symmetry Reduction for Probabilistic Model Checking. <i>Lecture Notes in Computer Science</i> , 2006 , 234-248	0.9	56
12	On Reduction Criteria for Probabilistic Reward Models. <i>Lecture Notes in Computer Science</i> , 2006 , 309-320	0.9	4
11	Using probabilistic model checking for dynamic power management. <i>Formal Aspects of Computing</i> , 2005 , 17, 160-176	1.2	38
10	Numerical vs. Statistical Probabilistic Model Checking: An Empirical Study. <i>Lecture Notes in Computer Science</i> , 2004 , 46-60	0.9	26
9	Probabilistic symbolic model checking with PRISM: a hybrid approach. <i>International Journal on Software Tools for Technology Transfer</i> , 2004 , 6, 128-142	1.3	189

8	Symbolic Representations and Analysis of Large Probabilistic Systems. <i>Lecture Notes in Computer Science</i> , 2004 , 296-338	0.9	31
7	On the use of MTBDDs for performability analysis and verification of stochastic systems. <i>The Journal of Logic and Algebraic Programming</i> , 2003 , 56, 23-67		44
6	A Symbolic Out-of-Core Solution Method for Markov Models. <i>Electronic Notes in Theoretical Computer Science</i> , 2002 , 68, 589-604	0.7	21
5	PRISM: Probabilistic Symbolic Model Checker. <i>Lecture Notes in Computer Science</i> , 2002 , 200-204	0.9	223
4	Symbolic Model Checking of Probabilistic Processes Using MTBDDs and the Kronecker Representation. <i>Lecture Notes in Computer Science</i> , 2000 , 395-410	0.9	52
3	Strategic Analysis of Trust Models for User-Centric Networks. <i>Electronic Proceedings in Theoretical Computer Science</i> , <i>EPTCS</i> ,112, 53-59		7
2	Automatic verification of concurrent stochastic systems. <i>Formal Methods in System Design</i> ,1	1.4	7
1	Verification of Real-Time Probabilistic Systems249-288		7