Osman Hasan

List of Publications by Year in Descending Order

208 papers	**1,414** citations	**18** h-index	**27** g-index
249 ext. papers	**1,787** ext. citations	**1.7** avg, IF	**5.28** L-index

#	Paper	IF	Citations
208	Formalization of Stability Theory. *SpringerBriefs in Applied Sciences and Technology*, **2022**, 31-45	0.4	
207	Formalization of Asymptotic Notations. *SpringerBriefs in Applied Sciences and Technology*, **2022**, 61-76	0.4	1
206	Formalization of Cost and Utility in Microeconomics. *SpringerBriefs in Applied Sciences and Technology*, **2022**, 47-60	0.4	
205	Interactive Theorem Proving. *SpringerBriefs in Applied Sciences and Technology*, **2022**, 23-29	0.4	
204	Formal Verification of ZigBee-Based Routing Protocol for Smart Grids **2022**, 942-957		
203	Continual Learning for Real-World Autonomous Systems: Algorithms, Challenges and Frameworks. *Journal of Intelligent and Robotic Systems: Theory and Applications*, **2022**, 105, 1	2.9	2
202	Formal verification of Matrix based MATLAB models using interactive theorem proving. *PeerJ Computer Science*, **2021**, 7, e440	2.7	2
201	Machine-Learning-Based Self-Tunable Design of Approximate Computing. *IEEE Transactions on Very Large Scale Integration (VLSI) Systems*, **2021**, 29, 800-813	2.6	3
200	An evolutionary/heuristic-based proof searching framework for interactive theorem prover. *Applied Soft Computing Journal*, **2021**, 104, 107200	7.5	2
199	Formal analysis of the continuous dynamics of cyber-physical systems using theorem proving. *Journal of Systems Architecture*, **2021**, 112, 101850	5.5	3
198	LPQ-SAM: A Low-Power Quality Scalable Approximate Multiplier. *Journal of Circuits, Systems and Computers*, **2021**, 30, 2150017	0.9	0
197	Proof searching and prediction in HOL4 with evolutionary/heuristic and deep learning techniques. *Applied Intelligence*, **2021**, 51, 1580-1601	4.9	2
196	Formal Verification of ZigBee-Based Routing Protocol for Smart Grids. *Advances in Information Quality and Management*, **2021**, 1002-1017	0.1	
195	Chronic kidney disease diagnosis using decision tree algorithms. *BMC Nephrology*, **2021**, 22, 273	2.7	9
194	. *IEEE Internet of Things Journal*, **2021**, 8, 13251-13265	10.7	3
193	A Quality-assured Approximate Hardware Accelerators Based on Machine Learning and Dynamic Partial Reconfiguration. *ACM Journal on Emerging Technologies in Computing Systems*, **2021**, 17, 1-19	1.7	0
192	ForASec: Formal Analysis of Hardware Trojan-based Security Vulnerabilities in Sequential Circuits. *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems*, **2021**, 1-1	2.5	0

191	Stunting diagnostic and awareness: impact assessment study of sociodemographic factors of stunting among school-going children of Pakistan. *BMC Pediatrics*, **2020**, 20, 232	2.6	3
190	Formal Verification of Robotic Cell Injection systems up to 4-DOF using HOL Light. *Formal Aspects of Computing*, **2020**, 32, 229-250	1.2	1
189	SIMCom: Statistical sniffing of inter-module communications for runtime hardware trojan detection. *Microprocessors and Microsystems*, **2020**, 77, 103122	2.4	4
188	FANNet: Formal Analysis of Noise Tolerance, Training Bias and Input Sensitivity in Neural Networks **2020**,		4
187	Formal Reliability Analysis of an Integrated Power Generation System Using Theorem Proving. *IEEE Systems Journal*, **2020**, 14, 4820-4831	4.3	2
186	Formal reliability and failure analysis of ethernet based communication networks in a smart grid substation. *Formal Aspects of Computing*, **2020**, 32, 71-111	1.2	3
185	. *IEEE Access*, **2020**, 8, 27291-27307	3.5	0
184	Formal verification of robotic cell injection systems **2020**, 143-170		1
183	Petri net and rewriting logic based formal analysis of multi-agent based safety-critical systems. *Multiagent and Grid Systems*, **2020**, 16, 47-66	0.5	1
182	Machine Learning-Based Self-Compensating Approximate Computing **2020**,		1
181	Design and Realization of a Robotic Manipulator for Minimally Invasive Surgery With Replaceable Surgical Tools. *IEEE/ASME Transactions on Mechatronics*, **2020**, 25, 2754-2764	5.5	3
180	Proof searching in HOL4 with genetic algorithm **2020**,		3
179	Formal reasoning about synthetic biology using higher-order-logic theorem proving. *IET Systems Biology*, **2020**, 14, 271-283	1.4	1
178	How childhood diseases awareness contributes to minimize the risk of disease severity in children under five age: An evolutionary study. *JPMA the Journal of the Pakistan Medical Association*, **2020**, 70, 2210-2214	0.4	
177	Formalization of Cost and Utility in Microeconomics. *Energies*, **2020**, 13, 712	3.1	
176	Formal analysis of the biological circuits using higher-order-logic theorem proving **2020**,		2
175	A Framework for Formal Dynamic Dependability Analysis Using HOL Theorem Proving. *Lecture Notes in Computer Science*, **2020**, 105-122	0.9	3
174	. *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems*, **2020**, 39, 3748-3761	2.5	4

173	Formal Verification of ECCs for Memories Using ACL2. *Journal of Electronic Testing: Theory and Applications (JETTA)*, **2020**, 36, 643-663	0.7	1
172	Formal Analysis of Unmanned Aerial Vehicles Using Higher-Order-Logic Theorem Proving. *Journal of Aerospace Information Systems*, **2020**, 17, 481-495	1	1
171	PEMACx: A Probabilistic Error Analysis Methodology for Adders with Cascaded Approximate Units **2020**,		2
170	Toward Model Checking-Driven Fair Comparison of Dynamic Thermal Management Techniques Under Multithreaded Workloads. *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems*, **2020**, 39, 1725-1738	2.5	1
169	Formal Asymptotic Analysis of Online Scheduling Algorithms for Plug-In Electric Vehicles Charging. *Energies*, **2019**, 12, 19	3.1	4
168	Formal Analysis of Robotic Cell Injection Systems Using Theorem Proving. *Lecture Notes in Computer Science*, **2019**, 127-141	0.9	3
167	Self-compensating accelerators for efficient approximate computing. *Microelectronics Journal*, **2019**, 88, 9-17	1.8	3
166	Formal analysis of continuous-time systems using Fourier transform. *Journal of Symbolic Computation*, **2019**, 90, 65-88	0.8	2
165	Using Machine Learning for Quality Configurable Approximate Computing **2019**,		4
164	SecureSurgiNET: A framework for ensuring security in telesurgery. *International Journal of Distributed Sensor Networks*, **2019**, 15, 155014771987381	1.7	3
163	A Methodology for the Formal Verification of Dynamic Fault Trees Using HOL Theorem Proving. *IEEE Access*, **2019**, 7, 136176-136192	3.5	4
162	Input-Conscious Approximate Multiply-Accumulate (MAC) Unit for Energy-Efficiency. *IEEE Access*, **2019**, 7, 147129-147142	3.5	9
161	EasyDetectDisease: An Android App for Early Symptom Detection and Prevention of Childhood Infectious Diseases. *Interactive Journal of Medical Research*, **2019**, 8, e12664	2.1	3
160	State of the Art and Key Design Challenges of Telesurgical Robotics. *Advances in Computer and Electrical Engineering Book Series*, **2019**, 1100-1111	0.3	1
159	Formal Verification of Rewriting Rules for Dynamic Fault Trees. *Lecture Notes in Computer Science*, **2019**, 513-531	0.9	1
158	Load Flow Analysis in Smart Grids. *Advances in Environmental Engineering and Green Technologies Book Series*, **2019**, 187-199	0.4	
157	Formal Timing Analysis of Digital Circuits. *Communications in Computer and Information Science*, **2019**, 84-100	0.3	
156	Telesurgical Robotics and a Kinematic Perspective. *Advances in Computer and Electrical Engineering Book Series*, **2019**, 1112-1126	0.3	

155	A Formally Verified Algebraic Approach for Dynamic Reliability Block Diagrams. *Lecture Notes in Computer Science*, **2019**, 253-269	0.9	2
154	Formal Stability Analysis of Control Systems. *Communications in Computer and Information Science*, **2019**, 3-17	0.3	
153	Using gate-level side channel parameters for formally analyzing vulnerabilities in integrated circuits. *Science of Computer Programming*, **2019**, 171, 42-66	1.1	4
152	Formal comparison of LEACH and its extensions. *Computer Standards and Interfaces*, **2019**, 62, 119-127	3.5	7
151	Probabilistic Error Analysis of Approximate Adders and Multipliers **2019**, 99-120		2
150	Formal Probabilistic Analysis of Low Latency Approximate Adders. *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems*, **2019**, 38, 177-189	2.5	8
149	Wearable technologies for hand joints monitoring for rehabilitation: A survey. *Microelectronics Journal*, **2019**, 88, 173-183	1.8	36
148	Formal Dynamic Fault Trees Analysis Using an Integration of Theorem Proving and Model Checking. *Lecture Notes in Computer Science*, **2018**, 139-156	0.9	8
147	Statistical model checking of relief supply location and distribution in natural disaster management. *International Journal of Disaster Risk Reduction*, **2018**, 31, 1043-1053	4.5	8
146	Ver2Smv A tool for automatic verilog to SMV translation for verifying digital circuits **2018**,		2
145	Formal reliability analysis of oil and gas pipelines. *Proceedings of the Institution of Mechanical Engineers, Part O: Journal of Risk and Reliability*, **2018**, 232, 320-334	0.8	1
144	Towards Probabilistic Formal Analysis of SATS-Simultaneously Moving Aircraft (SATS-SMA). *Journal of Automated Reasoning*, **2018**, 60, 85-105	1	1
143	A Library for Combinational Circuit Verification Using the HOL Theorem Prover. *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems*, **2018**, 37, 512-516	2.5	5
142	SAT Based Fitness Scoring for Digital Circuit Evolution. *Journal of Circuits, Systems and Computers*, **2018**, 27, 1850099	0.9	1
141	Formal Verification of Platoon Control Strategies. *Lecture Notes in Computer Science*, **2018**, 223-238	0.9	7
140	. *IEEE Access*, **2018**, 6, 32240-32257	3.5	4
139	Comparative Study of Approximate Multipliers **2018**,		14
138	State of the Art and Key Design Challenges of Telesurgical Robotics **2018**, 6872-6881		1

137	Load Flow Analysis in Smart Grids **2018**, 3103-3113		
136	Telesurgical Robotics and a Kinematic Perspective **2018**, 6882-6893		1
135	Formal Verification and Safety Assessment of a Hemodialysis Machine. *Lecture Notes in Computer Science*, **2018**, 241-254	0.9	2
134	Runtime hardware Trojan monitors through modeling burst mode communication using formal verification. *The Integration VLSI Journal*, **2018**, 61, 62-76	1.4	13
133	Adaptive Approximate Computing in Arithmetic Datapaths. *IEEE Design and Test*, **2018**, 35, 65-74	1.4	10
132	ApproxCT: Approximate Clustering Techniques for Energy Efficient Computer Vision in Cyber-Physical Systems **2018**,		4
131	A Utility Maximized Demand-Side Management for Autonomous Microgrid **2018**,		2
130	Approximation-Conscious IC Testing **2018**,		1
129	Formal probabilistic performance verification of randomly-scheduled wireless sensor networks. *International Journal of Critical Computer-Based Systems*, **2018**, 8, 311	0.4	
128	Formal Verification of n-bit ALU Using Theorem Proving. *Lecture Notes in Computer Science*, **2018**, 74-89	0.9	
127	Formal probabilistic analysis of a surgical robot control algorithm with different virtual fixtures. *Innovations in Systems and Software Engineering*, **2018**, 14, 83-100	1.1	0
126	Formal Verification of Gate-Level Multiple Side Channel Parameters to Detect Hardware Trojans. *Communications in Computer and Information Science*, **2017**, 75-92	0.3	4
125	CAnDy-TM: Comparative analysis of dynamic thermal management in many-cores using model checking **2017**,		1
124	IoTRiskAnalyzer: A Probabilistic Model Checking Based Framework for Formal Risk Analytics of the Internet of Things. *IEEE Access*, **2017**, 5, 5494-5505	3.5	31
123	Power profiling of microcontroller's instruction set for runtime hardware Trojans detection without golden circuit models **2017**,		15
122	Probabilistic Error Analysis of Approximate Recursive Multipliers. *IEEE Transactions on Computers*, **2017**, 66, 1982-1990	2.5	27
121	NoC-Based Implementation of Free Form Deformations in Medical Imaging Registration. *Journal of Circuits, Systems and Computers*, **2017**, 26, 1750058	0.9	1
120	Behavior profiling of power distribution networks for runtime hardware trojan detection **2017**,		3

#	Title	IF	Cit
119	Formal Analysis of Information Flow in HOL. *Lecture Notes in Computer Science*, **2017**, 283-299	0.9	
118	Formal reasoning about systems biology using theorem proving. *PLoS ONE*, **2017**, 12, e0180179	3.7	4
117	Formal Probabilistic Analysis of a Virtual Fixture Control Algorithm for a Surgical Robot. *Lecture Notes in Computer Science*, **2017**, 1-16	0.9	1
116	Statistical Error Analysis for Low Power Approximate Adders **2017**,		23
115	Formalization of Transform Methods Using HOL Light. *Lecture Notes in Computer Science*, **2017**, 319-332	0.9	9
114	QuAd **2017**,		23
113	Formally Verifying Transfer Functions of Linear Analog Circuits. *IEEE Design and Test*, **2017**, 34, 30-37	1.4	2
112	FAMe-TM: Formal analysis methodology for task migration algorithms in Many-Core systems. *Science of Computer Programming*, **2017**, 133, 154-174	1.1	5
111	SmartSIM - a virtual reality simulator for laparoscopy training using a generic physics engine. *International Journal of Medical Robotics and Computer Assisted Surgery*, **2017**, 13, e1771	2.9	2
110	Reliability modeling and analysis of communication networks. *Journal of Network and Computer Applications*, **2017**, 78, 191-215	7.9	46
109	Theorem proving based Formal Verification of Distributed Dynamic Thermal Management schemes. *Journal of Parallel and Distributed Computing*, **2017**, 100, 157-171	4.4	8
108	Probabilistic Error Modeling for Approximate Adders. *IEEE Transactions on Computers*, **2017**, 66, 515-530	2.5	56
107	Formal Probabilistic Analysis of a WSN-Based Monitoring Framework for IoT Applications. *Communications in Computer and Information Science*, **2017**, 93-108	0.3	3
106	Formal Analysis of Linear Control Systems Using Theorem Proving. *Lecture Notes in Computer Science*, **2017**, 345-361	0.9	6
105	Clock domain crossing (CDC) in 3D-SICs: Semi QDI asynchronous vs loosely synchronous. *The Integration VLSI Journal*, **2016**, 52, 367-380	1.4	
104	Towards autonomous collision avoidance in surgical robots using image segmentation and genetic algorithms **2016**,		2
103	Formal reliability analysis of protective systems in smart grids **2016**,		4
102	Software testing: A survey and tutorial on white and black-box testing of C/C++ programs **2016**,		3

101	Formalization of Fault Trees in Higher-Order Logic: A Deep Embedding Approach. *Lecture Notes in Computer Science*, **2016**, 264-279	0.9	8
100	Analyzing Vulnerability of Asynchronous Pipeline to Soft Errors: Leveraging Formal Verification. *Journal of Electronic Testing: Theory and Applications (JETTA)*, **2016**, 32, 569-586	0.7	2
99	Formalization of Reliability Block Diagrams in Higher-order Logic. *Journal of Applied Logic*, **2016**, 18, 19-41		15
98	. *IEEE Systems Journal*, **2016**, 10, 1035-1045	4.3	17
97	g-HOL: A Graphical User Interface for the HOL Proof Assistant. *Communications in Computer and Information Science*, **2016**, 265-269	0.3	1
96	Formal Dependability Modeling and Analysis: A Survey. *Lecture Notes in Computer Science*, **2016**, 132-147	0.9	6
95	Formalization of Normal Random Variables in HOL. *Lecture Notes in Computer Science*, **2016**, 44-59	0.9	5
94	Formal Availability Analysis Using Theorem Proving. *Lecture Notes in Computer Science*, **2016**, 226-242	0.9	2
93	Formal verification of energy consumption for an EEG monitoring wireless body area sensor network **2016**,		1
92	On the Formalization of Fourier Transform in Higher-order Logic. *Lecture Notes in Computer Science*, **2016**, 483-490	0.9	7
91	Probabilistic Formal Verification of the SATS Concept of Operation. *Lecture Notes in Computer Science*, **2016**, 191-205	0.9	3
90	An area-efficient consolidated configurable error correction for approximate hardware accelerators **2016**,		26
89	Evaluation of anonymity and confidentiality protocols using theorem proving. *Formal Methods in System Design*, **2015**, 47, 265-286	1.4	6
88	Applying Formal Methods to Networking: Theory, Techniques, and Applications. *IEEE Communications Surveys and Tutorials*, **2015**, 17, 256-291	37.1	33
87	Framework for Formally Verifying Analog and Mixed-Signal Designs **2015**, 115-145		5
86	Reliability block diagrams based analysis: A survey **2015**,		5
85	Formal modeling and verification of integrated photonic systems **2015**,		4
84	Formal probabilistic analysis of detection properties in wireless sensor networks. *Formal Aspects of Computing*, **2015**, 27, 79-102	1.2	7

83	Formal reliability analysis of Device Interoperability Middleware (DIM) based E-health system using PRISM **2015**,		5
82	Triangular Geometrized Sampling Heuristics for Fast Optimal Motion Planning. *International Journal of Advanced Robotic Systems*, **2015**, 12, 10	1.4	4
81	Formal probabilistic analysis of distributed dynamic thermal management **2015**,		5
80	Safe-radius based motion planning of hexapod using RRT-connect **2015**,		1
79	Probabilistic Formal Verification Methodology for Decentralized Thermal Management in On-Chip Systems **2015**,		3
78	Formal analysis of a ZigBee-based routing protocol for smart grids using UPPAAL **2015**,		4
77	Formal reliability analysis of wireless sensor network data transport protocols using HOL **2015**,		7
76	Telesurgical Robotics **2015**, 5482-5490		3
75	Formal Verification Methods **2015**, 7162-7170		40
74	Formalized Probability Theory and Applications Using Theorem Proving **2015**,		3
73	Towards the Formalization of Fractional Calculus in Higher-Order Logic. *Lecture Notes in Computer Science*, **2015**, 316-324	0.9	2
72	Towards Formal Fault Tree Analysis Using Theorem Proving. *Lecture Notes in Computer Science*, **2015**, 39-54	0.9	14
71	Formally Analyzing Continuous Aspects of Cyber-Physical Systems Modeled by Homogeneous Linear Differential Equations. *Lecture Notes in Computer Science*, **2015**, 132-146	0.9	6
70	Formalization of Zsyntax to Reason About Molecular Pathways in HOL4. *Lecture Notes in Computer Science*, **2015**, 32-47	0.9	1
69	Formal Verification of Distributed Task Migration for Thermal Management in On-Chip Multi-core Systems Using nuXmv. *Communications in Computer and Information Science*, **2015**, 32-46	0.3	2
68	On the Formalization of Zsyntax with Applications in Molecular Biology. *Scalable Computing*, **2015**, 16,	2.4	2
67	Low Power Soft Error Tolerant Macro Synchronous Micro Asynchronous (MSMA) Pipeline **2014**,		6
66	Triangular geometry based optimal motion planning using RRT*-motion planner **2014**,		2

65	Formal Analysis of Optical Systems. *Mathematics in Computer Science*, **2014**, 8, 39-70	0.5	12
64	An approach for lifetime reliability analysis using theorem proving. *Journal of Computer and System Sciences*, **2014**, 80, 323-345	1	8
63	Formal analysis of electromagnetic optics **2014**,		3
62	Hardware Trojan detection in soft error tolerant macro synchronous micro asynchronous (MSMA) pipeline **2014**,		9
61	Formal reliability analysis of a typical FHIR standard based e-Health system using PRISM **2014**,		6
60	Formal verification of circuit-switched Network on chip (NoC) architectures using SPIN **2014**,		4
59	Augmenting RRT*-planner with local trees for motion planning in complex dynamic environments **2014**,		1
58	Timing variation aware dynamic digital phase detector for low-latency clock domain crossing. *IET Circuits, Devices and Systems*, **2014**, 8, 58-64	1.1	2
57	Towards Formal Reasoning about Molecular Pathways in HOL **2014**,		3
56	On the Formalization of Gamma Function in HOL. *Journal of Automated Reasoning*, **2014**, 53, 407-429	1	9
55	Towards the Formal Reliability Analysis of Oil and Gas Pipelines. *Lecture Notes in Computer Science*, **2014**, 30-44	0.9	13
54	Formalization of Complex Vectors in Higher-Order Logic. *Lecture Notes in Computer Science*, **2014**, 123-137	0.9	4
53	Formal Verification of Steady-State Errors in Unity-Feedback Control Systems. *Lecture Notes in Computer Science*, **2014**, 1-15	0.9	6
52	On the Formal Analysis of HMM Using Theorem Proving. *Lecture Notes in Computer Science*, **2014**, 316-331	0.9	3
51	Formal Reliability Analysis of Engineering Systems. *Advances in Information Security, Privacy, and Ethics Book Series*, **2014**, 224-238	0.3	
50	Formal Reasoning About Finite-State Discrete-Time Markov Chains in HOL. *Journal of Computer Science and Technology*, **2013**, 28, 217-231	1.7	12
49	Adaptive Potential guided directional-RRT **2013**,		8
48	Towards the Formal Performance Analysis of Wireless Sensor Networks **2013**,		3

47	Formal verification of distributed dynamic thermal management **2013**,		7
46	Formalization of Measure Theory and Lebesgue Integration for Probabilistic Analysis in HOL. *Transactions on Embedded Computing Systems*, **2013**, 12, 1-23	1.8	5
45	Formal Verification of Cyber-Physical Systems: Coping with Continuous Elements. *Lecture Notes in Computer Science*, **2013**, 358-371	0.9	28
44	Formal analysis of steady state errors in feedback control systems using HOL-light **2013**,		10
43	RRT*-SMART: A Rapid Convergence Implementation of RRT*. *International Journal of Advanced Robotic Systems*, **2013**, 10, 299	1.4	77
42	Formal Probabilistic Analysis of a Wireless Sensor Network for Forest Fire Detection. *Electronic Proceedings in Theoretical Computer Science, EPTCS*, **2013**, 122, 1-9		4
41	Formal Reasoning about Classified Markov Chains in HOL. *Lecture Notes in Computer Science*, **2013**, 295-310		4
40	Using Probabilistic Analysis for the Certification of Machine Control Systems. *Lecture Notes in Computer Science*, **2013**, 305-320	0.9	2
39	Formal Reliability Analysis of Protective Relays in Power Distribution Systems. *Lecture Notes in Computer Science*, **2013**, 169-183	0.9	7
38	Formal Analysis of Information Flow Using Min-Entropy and Belief Min-Entropy. *Lecture Notes in Computer Science*, **2013**, 131-146	0.9	2
37	Formal Kinematic Analysis of the Two-Link Planar Manipulator. *Lecture Notes in Computer Science*, **2013**, 347-362	0.9	6
36	Formalization of Laplace Transform Using the Multivariable Calculus Theory of HOL-Light. *Lecture Notes in Computer Science*, **2013**, 744-758	0.9	22
35	Formal Analysis of Memory Contention in a Multiprocessor System. *Lecture Notes in Computer Science*, **2013**, 195-210	0.9	5
34	RRT*-Smart: Rapid convergence implementation of RRT* towards optimal solution **2012**,		26
33	Formal Probabilistic Analysis of Cyber-Physical Transportation Systems. *Lecture Notes in Computer Science*, **2012**, 419-434	0.9	8
32	Quantitative Analysis of Information Flow Using Theorem Proving. *Lecture Notes in Computer Science*, **2012**, 119-134	0.9	4
31	Reasoning about conditional probabilities in a higher-order-logic theorem prover. *Journal of Applied Logic*, **2011**, 9, 23-40		6
30	Formal reliability analysis of combinational circuits using theorem proving. *Journal of Applied Logic*, **2011**, 9, 41-60		9

29	Formalization of Entropy Measures in HOL. *Lecture Notes in Computer Science*, **2011**, 233-248	0.9	20
28	Formalization of Finite-State Discrete-Time Markov Chains in HOL. *Lecture Notes in Computer Science*, **2011**, 90-104	0.9	9
27	Formal Analysis of a Scheduling Algorithm for Wireless Sensor Networks. *Lecture Notes in Computer Science*, **2011**, 388-403	0.9	13
26	Formal Analysis of Real-Time Systems **2011**, 342-375		
25	Formal Reliability Analysis Using Theorem Proving. *IEEE Transactions on Computers*, **2010**, 59, 579-592	2.5	22
24	**2010**,		30
23	Formally Analyzing Expected Time Complexity of Algorithms Using Theorem Proving. *Journal of Computer Science and Technology*, **2010**, 25, 1305-1320	1.7	2
22	On the Formalization of the Lebesgue Integration Theory in HOL. *Lecture Notes in Computer Science* , **2010**, 387-402	0.9	40
21	Formal Lifetime Reliability Analysis Using Continuous Random Variables. *Lecture Notes in Computer Science*, **2010**, 84-97	0.9	3
20	Formal Probabilistic Analysis: A Higher-Order Logic Based Approach. *Lecture Notes in Computer Science*, **2010**, 2-19	0.9	3
19	Formal Reasoning about Expectation Properties for Continuous Random Variables. *Lecture Notes in Computer Science*, **2009**, 435-450	0.9	16
18	Formal verification of tail distribution bounds in the HOL theorem prover. *Mathematical Methods in the Applied Sciences*, **2009**, 32, 480-504	2.3	7
17	Probabilistic Analysis of Wireless Systems Using Theorem Proving. *Electronic Notes in Theoretical Computer Science*, **2009**, 242, 43-58	0.7	9
16	Performance Analysis and Functional Verification of the Stop-and-Wait Protocol in HOL. *Journal of Automated Reasoning*, **2009**, 42, 1-33	1	12
15	Formal Probabilistic Analysis of Stuck-at Faults in Reconfigurable Memory Arrays. *Lecture Notes in Computer Science*, **2009**, 277-291	0.9	7
14	Formal Analysis of Optical Waveguides in HOL. *Lecture Notes in Computer Science*, **2009**, 228-243	0.9	10
13	Performance Analysis of ARQ Protocols using a Theorem Prover **2008**,		7
12	Using Theorem Proving to Verify Expectation and Variance for Discrete Random Variables. *Journal of Automated Reasoning*, **2008**, 41, 295-323	1	15

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11	Formalization of the Standard Uniform random variable. *Theoretical Computer Science*, **2007**, 382, 71-83	1.1	10
10	Verification of Expectation Properties for Discrete Random Variables in HOL. *Lecture Notes in Computer Science*, **2007**, 119-134	0.9	6
9	Verification of Tail Distribution Bounds in a Theorem Prover. *AIP Conference Proceedings*, **2007**,	0	3
8	Automated formal synthesis of Wallace Tree multipliers. *Midwest Symposium on Circuits and Systems*, **2007**,	1	6
7	Verification of Probabilistic Properties in HOL Using the Cumulative Distribution Function. *Lecture Notes in Computer Science*, **2007**, 333-352	0.9	10
6	Formalization of Continuous Probability Distributions. *Lecture Notes in Computer Science*, **2007**, 3-18	0.9	14
5	Towards the formal performance analysis of multistate coherent systems using HOL theorem proving. *Proceedings of the Institution of Mechanical Engineers, Part O: Journal of Risk and Reliability*,1748006X2210744	0.8	
4	Formal Reliability Analysis of Embedded Computing Systems50-64		
3	Formal Analysis of Soft Errors using Theorem Proving. *Electronic Proceedings in Theoretical Computer Science, EPTCS*,122, 75-84		2
2	Towards Probabilistic Formal Modeling of Robotic Cell Injection Systems. *Electronic Proceedings in Theoretical Computer Science, EPTCS*,244, 271-282		4
1	HVoC: a Hybrid Model Checking - Interactive Theorem Proving Approach for Functional Verification of Digital Circuits. *Journal of Electronic Testing: Theory and Applications (JETTA)*,1	0.7	