Stavros Tripakis

List of Publications by Year in Descending Order

121 papers	2,293 citations	27 h-index	43 g-index
125 ext. papers	2,617 ext. citations	1.2 avg, IF	5.33 L-index

#	Paper	IF	Citations
121	Decentralized Observation of Discrete-Event Systems: At Least One Can Tell **2021**, 1-1		
120	The refinement calculus of reactive systems. *Information and Computation*, **2021**, 104819	0.8	
119	Learning Moore machines from input–output traces. *International Journal on Software Tools for Technology Transfer*, **2021**, 23, 1-29	1.3	3
118	The Refinement Calculus of Reactive Systems Toolset. *International Journal on Software Tools for Technology Transfer*, **2020**, 22, 689-708	1.3	3
117	Hybrid co-simulation: it's about time. *Software and Systems Modeling*, **2019**, 18, 1655-1679	1.9	25
116	Mechanically Proving Determinacy of Hierarchical Block Diagram Translations. *Lecture Notes in Computer Science*, **2019**, 577-600	0.9	2
115	Constrained synthesis from component libraries. *Science of Computer Programming*, **2019**, 171, 21-41	1.1	4
114	Basic problems in multi-view modeling. *Software and Systems Modeling*, **2019**, 18, 1577-1611	1.9	2
113	Specification decomposition for synthesis from libraries of LTL Assume/Guarantee contracts **2018**,		1
112	Checking multi-view consistency of discrete systems with respect to periodic sampling abstractions. *Science of Computer Programming*, **2018**, 167, 1-24	1.1	
111	Modular Code Generation from Synchronous Block Diagrams: Interfaces, Abstraction, Compositionality. *Lecture Notes in Computer Science*, **2018**, 449-477	0.9	0
110	The Refinement Calculus of Reactive Systems Toolset. *Lecture Notes in Computer Science*, **2018**, 201-208	0.9	4
109	The Science of Software and System Design. *IFAC-PapersOnLine*, **2018**, 51, 505-507	0.7	
108	Modeling for Verification **2018**, 75-105		3
107	Data-driven and model-based design **2018**,		7
106	Supervisory control and reactive synthesis: a comparative introduction. *Discrete Event Dynamic Systems: Theory and Applications*, **2017**, 27, 209-260	1	29
105	Automatic Synthesis of Distributed Protocols. *ACM SIGACT News*, **2017**, 48, 55-90	0.3	13

104	Runtime enforcement of reactive systems using synchronous enforcers **2017**,		8
103	Predictive runtime enforcement. *Formal Methods in System Design*, **2017**, 51, 154-199	1.4	10
102	Predictive runtime verification of timed properties. *Journal of Systems and Software*, **2017**, 132, 353-365	3.3	19
101	Runtime Enforcement of Cyber-Physical Systems. *Transactions on Embedded Computing Systems*, **2017**, 16, 1-25	1.8	15
100	When Do We Not Need Complex Assume-Guarantee Rules?. *Transactions on Embedded Computing Systems*, **2017**, 16, 1-25	1.8	2
99	Checking Multi-view Consistency of Discrete Systems with Respect to Periodic Sampling Abstractions. *Lecture Notes in Computer Science*, **2017**, 73-91	0.9	1
98	Constrained Synthesis from Component Libraries. *Lecture Notes in Computer Science*, **2017**, 92-110	0.9	1
97	Type Inference of Simulink Hierarchical Block Diagrams in Isabelle. *Lecture Notes in Computer Science*, **2017**, 194-209	0.9	6
96	Tokens vs. Signals: On Conformance between Formal Models of Dataflow and Hardware. *Journal of Signal Processing Systems*, **2016**, 85, 23-43	1.4	3
95	Step revision in hybrid Co-simulation with FMI **2016**,		10
94	FIDE **2016**,		14
93	Predictive runtime enforcement **2016**,		5
92	Compositional Runtime Enforcement. *Lecture Notes in Computer Science*, **2016**, 82-99	0.9	4
91	Learning Moore Machines from Input-Output Traces. *Lecture Notes in Computer Science*, **2016**, 291-309	0.9	12
90	Towards Compositional Feedback in Non-Deterministic and Non-Input-Receptive Systems **2016**,		8
89	Multi-view consistency for infinitary regular languages **2016**,		1
88	Compositionality in the Science of System Design. *Proceedings of the IEEE*, **2016**, 104, 960-972	14.3	27
87	Compositional Semantics and Analysis of Hierarchical Block Diagrams. *Lecture Notes in Computer Science*, **2016**, 38-56	0.9	14

86	Compositional Model-Based System Design and Other Foundations for Mastering Change. *Lecture Notes in Computer Science*, **2016**, 113-129	0.9	2
85	Requirements for hybrid cosimulation standards **2015**,		27
84	Bridging the semantic gap between heterogeneous modeling formalisms and FMI **2015**,		20
83	Towards cyber-physical agnosticism by enhancing IEC 61499 with PTIDES model of computations **2015**,		12
82	**2015**,		2
81	Co-Simulation of Hybrid Systems with SpaceEx and Uppaal **2015**,		12
80	Automatic Completion of Distributed Protocols with Symmetry. *Lecture Notes in Computer Science*, **2015**, 395-412	0.9	10
79	Optimized implementation of synchronous models on industrial LTTA systems. *Journal of Systems Architecture*, **2014**, 60, 315-328	5.5	3
78	On tokens and signals: Bridging the semantic gap between dataflow models and hardware implementations **2014**,		1
77	Bridging the Gap between Supervisory Control and Reactive Synthesis: Case of Full Observation and Centralized Control. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control* , **2014**, 47, 222-227		11
76	Library-based scalable refinement checking for contract-based design **2014**,		7
75	Game theoretic secure localization in wireless sensor networks **2014**,		4
74	Are interface theories equivalent to contract theories? **2014**,		7
73	Refinement calculus of reactive systems **2014**,		12
72	Library-based scalable refinement checking for contract-based design **2014**,		2
71	Synthesizing Finite-State Protocols from Scenarios and Requirements. *Lecture Notes in Computer Science*, **2014**, 75-91	0.9	21
70	Feedback in Synchronous Relational Interfaces. *Lecture Notes in Computer Science*, **2014**, 249-266	0.9	1
69	Basic Problems in Multi-View Modeling. *Lecture Notes in Computer Science*, **2014**, 217-232	0.9	15

68	Determinate composition of FMUs for co-simulation **2013**,		59
67	A characterization of integrated multi-view modeling in the context of embedded and cyber-physical systems **2013**,		33
66	Compositionality in synchronous data flow. *Transactions on Embedded Computing Systems*, **2013**, 12, 1-26	1.8	33
65	A modular formal semantics for Ptolemy *Mathematical Structures in Computer Science*, **2013**, 23, 834-881	0.5	28
64	Cyber-physical system design contracts **2013**,		59
63	On the Verification of Timed Discrete-Event Models. *Lecture Notes in Computer Science*, **2013**, 213-227	0.9	2
62	Error-Completion in Interface Theories. *Lecture Notes in Computer Science*, **2013**, 358-375	0.9	2
61	Verifying hierarchical Ptolemy II discrete-event models using Real-Time Maude. *Science of Computer Programming*, **2012**, 77, 1235-1271	1.1	15
60	Viewpoints, formalisms, languages, and tools for cyber-physical systems **2012**,		42
59	Static dataflow with access patterns **2012**,		5
58	Correct and non-defensive glue design using abstract models **2011**,		7
57	The earlier the better **2011**,		32
56	A Theory of Synchronous Relational Interfaces. *ACM Transactions on Programming Languages and Systems*, **2011**, 33, 1-41	1.6	43
55	Exploring models of computation with ptolemy II **2010**,		13
54	Checking timed Büchi automata emptiness on simulation graphs. *ACM Transactions on Computational Logic*, **2009**, 10, 1-19	0.9	28
53	Conformance testing for real-time systems. *Formal Methods in System Design*, **2009**, 34, 238-304	1.4	100
52	Modular code generation from synchronous block diagrams. *ACM SIGPLAN Notices*, **2009**, 44, 78-89	0.2	6
51	On relational interfaces **2009**,		13

50	Scalable Semantic Annotation Using Lattice-Based Ontologies. *Lecture Notes in Computer Science*, **2009**, 393-407	0.9	17
49	A Combined On-Line/Off-Line Framework for Black-Box Fault Diagnosis. *Lecture Notes in Computer Science*, **2009**, 152-167	0.9	3
48	Verifying Ptolemy II Discrete-Event Models Using Real-Time Maude. *Lecture Notes in Computer Science*, **2009**, 717-736	0.9	21
47	Translating data flow to synchronous block diagrams **2008**,		2
46	Implementing Synchronous Models on Loosely Time Triggered Architectures. *IEEE Transactions on Computers*, **2008**, 57, 1300-1314	2.5	53
45	Modular Code Generation from Triggered and Timed Block Diagrams **2008**,		19
44	State identification problems for input/output transition systems **2008**,		3
43	Fault diagnosis with dynamic observers **2008**,		5
42	Modularity vs. reusability **2008**,		19
41	Modular code generation from synchronous block diagrams **2008**,		12
40	Semantics-preserving multitask implementation of synchronous programs. *Transactions on Embedded Computing Systems*, **2008**, 7, 1-40	1.8	26
39	Modularity vs. Reusability: Code Generation from Synchronous Block Diagrams **2008**,		5
38	Automatic generation of path conditions for concurrent timed systems. *Theoretical Computer Science*, **2008**, 404, 275-292	1.1	1
37	Test Case Generation for Ultimately Periodic Paths **2008**, 120-135		1
36	Deep Random Search for Efficient Model Checking of Timed Automata. *Lecture Notes in Computer Science*, **2008**, 111-124	0.9	1
35	Resource-Aware Verification Using Randomized Exploration of Large State Spaces. *Lecture Notes in Computer Science*, **2008**, 214-231	0.9	2
34	Sensor Minimization Problems with Static or Dynamic Observers for Fault Diagnosis **2007**,		19
33	Loosely time-triggered architectures based on communication-by-sampling **2007**,		19

32	Synthesis Of Optimal-Cost Dynamic Observers for Fault Diagnosis of Discrete-Event Systems **2007**,		6
31	Folk theorems on the determinization and minimization of timed automata. *Information Processing Letters*, **2006**, 99, 222-226	0.8	22
30	A memory-optimal buffering protocol for preservation of synchronous semantics under preemptive scheduling **2006**,		29
29	Communication by sampling in time-sensitive distributed systems **2006**,		4
28	Testing Conformance of Real-Time Applications by Automatic Generation of Observers. *Electronic Notes in Theoretical Computer Science*, **2005**, 113, 23-43	0.7	18
27	Checking Timed Büchi Automata Emptiness Efficiently. *Formal Methods in System Design*, **2005**, 26, 267-292	2.4	46
26	State Identification Problems for Timed Automata. *Lecture Notes in Computer Science*, **2005**, 175-191	0.9	4
25	Translating discrete-time simulink to lustre. *Transactions on Embedded Computing Systems*, **2005**, 4, 779-818	1.8	90
24	Generating Path Conditions for Timed Systems. *Lecture Notes in Computer Science*, **2005**, 5-19	0.9	2
23	Implementation of Timed Automata: An Issue of Semantics or Modeling?. *Lecture Notes in Computer Science*, **2005**, 273-288	0.9	30
22	Decentralized control of discrete-event Systems With bounded or Unbounded Delay communication. *IEEE Transactions on Automatic Control*, **2004**, 49, 1489-1501	5.9	72
21	Black-Box Conformance Testing for Real-Time Systems. *Lecture Notes in Computer Science*, **2004**, 109-126	0.9	85
20	Undecidable problems of decentralized observation and control on regular languages. *Information Processing Letters*, **2004**, 90, 21-28	0.8	62
19	Real-Time Testing with Timed Automata Testers and Coverage Criteria. *Lecture Notes in Computer Science*, **2004**, 134-151	0.9	9
18	Folk Theorems on the Determinization and Minimization of Timed Automata. *Lecture Notes in Computer Science*, **2004**, 182-188	0.9	11
17	From simulink to SCADE/lustre to TTA **2003**,		49
16	From simulink to SCADE/lustre to TTA. *ACM SIGPLAN Notices*, **2003**, 38, 153-162	0.2	34
15	Translating Discrete-Time Simulink to Lustre. *Lecture Notes in Computer Science*, **2003**, 84-99	0.9	27

14	Automated Module Composition. *Lecture Notes in Computer Science*, **2003**, 347-362	0.9	3
13	Automated Composition of Module Chains. *Electronic Notes in Theoretical Computer Science*, **2002**, 65, 81-90	0.7	1
12	Fault Diagnosis for Timed Automata. *Lecture Notes in Computer Science*, **2002**, 205-221	0.9	90
11	Description and Schedulability Analysis of the Software Architecture of an Automated Vehicle Control System. *Lecture Notes in Computer Science*, **2002**, 123-137	0.9	5
10	Timing Analysis and Code Generation of Vehicle Control Software using Taxys. *Electronic Notes in Theoretical Computer Science*, **2001**, 55, 277-286	0.7	6
9	Analysis of Timed Systems Using Time-Abstracting Bisimulations. *Formal Methods in System Design*, **2001**, 18, 25-68	1.4	80
8	Efficient Verification of Timed Automata Using Dense and Discrete Time Semantics. *Lecture Notes in Computer Science*, **1999**, 125-141	0.9	22
7	On-the-Fly Controller Synthesis for Discrete and Dense-Time Systems. *Lecture Notes in Computer Science*, **1999**, 233-252	0.9	27
6	Verifying Progress in Timed Systems. *Lecture Notes in Computer Science*, **1999**, 299-314	0.9	40
5	Kronos: A model-checking tool for real-time systems. *Lecture Notes in Computer Science*, **1998**, 546-550	0.9	118
4	Model checking of real-time reachability properties using abstractions. *Lecture Notes in Computer Science*, **1998**, 313-329	0.9	81
3	Kronos: A model-checking tool for real-time systems. *Lecture Notes in Computer Science*, **1998**, 298-302	0.9	20
2	Extending promela and spin for real time. *Lecture Notes in Computer Science*, **1996**, 329-348	0.9	26
1	Fault Diagnosis of Timed Systems107-138		0