Peter Gorm Larsen

List of Publications by Year in Descending Order

122 papers	1,639 citations	17 h-index	38 g-index
136 ext. papers	1,931 ext. citations	1.6 avg, IF	4.87 L-index

#	Paper	IF	Citations
122	HUBCAP: A Novel Collaborative Approach to Model-Based Design of Cyber-Physical Systems. *Lecture Notes in Networks and Systems*, **2022**, 90-110	0.5	
121	Industrial digitalization in the industry 4.0 era: Classification, reuse and authoring of digital models on Digital Twin platforms. *Array*, **2022**, 100176	4.7	0
120	Developing a Physical and Digital Twin: An Example Process Model **2021**,		1
119	Facilitating model-based design of cyber-manufacturing systems. *Procedia CIRP*, **2021**, 104, 1936-1941	1.8	3
118	Towards a Digital Twin Framework for Autonomous Robots **2021**,		4
117	Introducing Regression Tests and Upgrades to the INTO-CPS Application. *Lecture Notes in Computer Science*, **2021**, 311-317	0.9	
116	Estimating the maximum allowable delay bound for networked control systems using co-simulation and design space exploration **2021**, 257-280		
115	Multi-paradigm modelling and co-simulation in prototyping a cyber-physical production system **2021**, 169-194		
114	Uncertainty Quantification and Runtime Monitoring Using Environment-Aware Digital Twins. *Lecture Notes in Computer Science*, **2021**, 72-87	0.9	5
113	On the Design of a New Software Engineering Curriculum in Computer Engineering. *Lecture Notes in Computer Science*, **2020**, 178-195	0.9	1
112	ViennaDoc: An Animatable and Testable Specification Documentation Tool. *Lecture Notes in Computer Science*, **2020**, 289-302	0.9	
111	Towards a Static Check of FMUs in VDM-SL. *Lecture Notes in Computer Science*, **2020**, 272-288	0.9	0
110	Migrating the INTO-CPS Application to the Cloud. *Lecture Notes in Computer Science*, **2020**, 254-271	0.9	5
109	Generation of Co-simulation Algorithms Subject to Simulator Contracts. *Lecture Notes in Computer Science*, **2020**, 34-49	0.9	3
108	Towards Reuse of Synchronization Algorithms in Co-simulation Frameworks. *Lecture Notes in Computer Science*, **2020**, 50-66	0.9	5
107	Collaborative Modelling and Co-simulation in Engineering and Computing Curricula. *Lecture Notes in Computer Science*, **2020**, 196-213	0.9	2
106	Enabling continuous integration in a formal methods setting. *International Journal on Software Tools for Technology Transfer*, **2020**, 22, 667-683	1.3	2

105	Editorial to the theme section on model-based engineering of smart systems. *Software and Systems Modeling*, **2020**, 19, 579-580	1.9	
104	The Harvest Coach Architecture: Embedding Deviation-Tolerance in a Harvest Logistic Solution. *Computers*, **2019**, 8, 31	1.9	5
103	Realization of distributed system models using code generation extensions. *Software - Practice and Experience*, **2019**, 49, 478-497	2.5	2
102	Security analysis of cloud-connected industrial control systems using combinatorial testing **2019**,		1
101	Distributed Co-simulation of Embedded Control Software Using INTO-CPS. *Advances in Intelligent Systems and Computing*, **2019**, 33-54	0.4	3
100	Multi-modelling and Co-simulation in the Engineering of Cyber-Physical Systems: Towards the Digital Twin. *Lecture Notes in Computer Science*, **2019**, 40-55	0.9	15
99	Code generation for distributed embedded systems with VDM-RT. *Design Automation for Embedded Systems*, **2019**, 23, 153-177	0.6	4
98	Maestro: The INTO-CPS co-simulation framework. *Simulation Modelling Practice and Theory*, **2019**, 92, 45-61	3.9	34
97	Automated translation of VDM to JML-annotated Java. *International Journal on Software Tools for Technology Transfer*, **2018**, 20, 211-235	1.3	7
96	Multi-Paradigm Discrete-Event Modelling and Co-simulation of Cyber-Physical Systems. *Studies in Informatics and Control*, **2018**, 27,	2.1	6
95	From Software Specifications to Constraint Programming. *Lecture Notes in Computer Science*, **2018**, 21-36	0.9	
94	Cyber-Physical Systems Engineering: An Introduction. *Lecture Notes in Computer Science*, **2018**, 407-410	0.9	1
93	Towards the Verification of Hybrid Co-simulation Algorithms. *Lecture Notes in Computer Science*, **2018**, 5-20	0.9	11
92	Demo: Stabilization Technique in INTO-CPS. *Lecture Notes in Computer Science*, **2018**, 45-51	0.9	3
91	Injecting Formal Verification in FMI-Based Co-simulations of Cyber-Physical Systems. *Lecture Notes in Computer Science*, **2018**, 284-299	0.9	5
90	Development of a Driverless Lawn Mower Using Co-simulation. *Lecture Notes in Computer Science*, **2018**, 330-344	0.9	10
89	Features of Integrated Model-Based Co-modelling and Co-simulation Technology. *Lecture Notes in Computer Science*, **2018**, 377-390	0.9	12
88	Co-simulation: The Past, Future, and Open Challenges. *Lecture Notes in Computer Science*, **2018**, 504-520	0.9	3

87	A Non-unified View of Modelling, Specification and Programming. *Lecture Notes in Computer Science*, **2018**, 52-68	0.9	1
86	Co-Simulation. *ACM Computing Surveys*, **2018**, 51, 1-33	13.4	119
85	A Formal Modeling Tool for Exploratory Modeling in Software Development. *IEICE Transactions on Information and Systems*, **2017**, E100.D, 1210-1217	0.6	2
84	Enhancing non-technical skills by a multidisciplinary engineering summer school. *European Journal of Engineering Education*, **2017**, 42, 1076-1096	1.5	7
83	A holistic approach to energy-aware design of cyber-physical systems. *International Journal of Embedded Systems*, **2017**, 9, 283	0.5	5
82	Distributed Co-Simulation of Embedded Control Software with Exhaust Gas Recirculation Water Handling System using INTO-CPS **2017**,		13
81	Energy-Aware Model-Driven Development of a Wearable Healthcare Device. *Lecture Notes in Computer Science*, **2017**, 44-63	0.9	
80	ViennaTalk and Assertch **2016**,		1
79	Collaborative Model-based Systems Engineering for Cyber-Physical Systems, with a Building Automation Case Study. *Incose International Symposium*, **2016**, 26, 817-832	0.4	17
78	Integrated tool chain for model-based design of Cyber-Physical Systems: The INTO-CPS project **2016**,		54
77	A secure dynamic collaboration environment in a cloud context. *Future Generation Computer Systems*, **2016**, 55, 165-175	7.5	3
76	The evolution of VDM tools from the 1990s to 2015 and the influence of CAMILA. *Journal of Logical and Algebraic Methods in Programming*, **2016**, 85, 985-998	1	1
75	Towards Semantically Integrated Models and Tools for Cyber-Physical Systems Design. *Lecture Notes in Computer Science*, **2016**, 171-186	0.9	15
74	Formalising and Validating the Interface Description in the FMI Standard. *Lecture Notes in Computer Science*, **2016**, 344-351	0.9	2
73	Systems of Systems Engineering. *ACM Computing Surveys*, **2015**, 48, 1-41	13.4	177
72	Cyber-Physical Systems Design: Formal Foundations, Methods and Integrated Tool Chains **2015**,		28
71	VDMPad: A Lightweight IDE for Exploratory VDM-SL Specification **2015**,		4
70	Robotic Design Choice Overview Using Co-Simulation and Design Space Exploration. *Robotics*, **2015**, 4, 398-420	2.8	4

69	Model checking CML: tool development and industrial applications. *Formal Aspects of Computing*, **2015**, 27, 975-1001	1.2	1
68	Collaborative formal modeling of System of Systems **2014**,		1
67	Co-modelling and co-simulation in the engineering of systems of cyber-physical systems **2014**,		7
66	Collaborative Design for Embedded Systems **2014**,		29
65	From Embedded to Cyber-Physical Systems: Challenges and Future Directions **2014**, 293-303		8
64	An approach for managing semantic heterogeneity in Systems of Systems Engineering **2014**,		3
63	Foundations for Model-Based Engineering of Systems of Systems **2014**, 1-19		12
62	Industrial Application of Co-modelling and Co-simulation Technology **2014**, 223-259		
61	Collaborative Development of Dependable Cyber-Physical Systems by Co-Modeling and Co-Simulation. *Advances in Systems Analysis, Software Engineering, and High Performance Computing Book Series*, **2014**, 1-28	0.4	1
60	Discrete-Event Modelling in VDM **2014**, 61-95		
59	Support for Co-modelling and Co-simulation: The Crescendo Tool **2014**, 97-114		3
58	Contracts in CML. *Lecture Notes in Computer Science*, **2014**, 54-73	0.9	1
57	Collaborative Systems of Systems Need Collaborative Design. *Lecture Notes in Computer Science*, **2014**, 16-23	0.9	1
56	Co-model Structuring and Design Patterns **2014**, 115-137		0
55	Deploying Co-modelling in Commercial Practice **2014**, 263-271		
54	Semantics of Co-simulation **2014**, 273-292		
53	A formal approach to collaborative modelling and co-simulation for embedded systems *Mathematical Structures in Computer Science*, **2013**, 23, 726-750	0.5	12
52	Industrial Deployment of Formal Methods: Trends and Challenges **2013**, 123-143		5

51	COMPASS tool vision for a system of systems Collaborative Development Environment **2012**,		18
50	Features of CML: A formal modelling language for Systems of Systems **2012**,		45
49	Extending VDM-RT to enable the formal modelling of System of Systems **2012**,		5
48	Combining VDM with Executable Code. *Lecture Notes in Computer Science*, **2012**, 266-279	0.9	11
47	A Deterministic Interpreter Simulating a Distributed Real Time System Using VDM. *Lecture Notes in Computer Science*, **2011**, 179-194	0.9	10
46	Design support and tooling for dependable embedded control software **2010**,		6
45	The overture initiative integrating tools for VDM. *Software Engineering Notes: an Informal Newsletter of the Special Interest Committee on Software Engineering / ACM*, **2010**, 35, 1-6	0.4	82
44	Proving consistency of VDM models using HOL **2010**,		3
43	Combinatorial Testing for VDM **2010**,		13
42	Collaborative Modelling and Co-simulation in the Development of Dependable Embedded Systems. *Lecture Notes in Computer Science*, **2010**, 12-26	0.9	13
41	Proof Obligation Generation and Discharging for Recursive Definitions in VDM. *Lecture Notes in Computer Science*, **2010**, 40-55	0.9	5
40	Practice-oriented courses in formal methods using VDM++. *Formal Aspects of Computing*, **2009**, 21, 245-257	0.7	8
39	Formal methods. *ACM Computing Surveys*, **2009**, 41, 1-36	13.4	340
38	Industrial Practice in Formal Methods: A Review. *Lecture Notes in Computer Science*, **2009**, 810-813	0.9	11
37	A multidisciplinary engineering summer school in an industrial setting. *European Journal of Engineering Education*, **2009**, 34, 511-526	1.5	17
36	Connecting UML and VDM++ with Open Tool Support. *Lecture Notes in Computer Science*, **2009**, 563-578	0.9	6
35	Modelling Systems: Practical Tools and Techniques in Software Development **2009**,		54
34	Vienna Development Method **2008**, 1		17

33	Incremental Development of a Distributed Real-Time Model of a Cardiac Pacing System Using VDM **2008**, 181-197		25
32	Balancing Insight and Effort: The Industrial Uptake of Formal Methods **2007**, 237-254		5
31	Validation Support for Distributed Real-Time Embedded Systems in VDM++ **2007**,		7
30	Triumphs and Challenges for Model-Oriented Formal Methods: The VDM++ Experience (Abstract) **2006**,		6
29	Modeling and Validating Distributed Embedded Real-Time Systems with VDM++. *Lecture Notes in Computer Science*, **2006**, 147-162	0.9	54
28	Using VDMTools to Model and Validate the Cash Dispenser Example. *Formal Aspects of Computing*, **2000**, 12, 216-217	1.2	
27	A Lightweight Approach to Formal Methods. *Lecture Notes in Computer Science*, **1999**, 168-183	0.9	13
26	The IFAD VDM Tools. *Lecture Notes in Computer Science*, **1999**, 326-329	0.9	2
25	PICGAL: Practical use of formal specification to develop a complex critical system. *Lecture Notes in Computer Science*, **1997**, 221-236	0.9	5
24	Semantics of under-determined expressions. *Formal Aspects of Computing*, **1996**, 8, 47-66	1.2	13
23	Combining VDM-SL specifications with C++ code. *Lecture Notes in Computer Science*, **1996**, 179-194	0.9	8
22	The formal semantics of ISO VDM-SL. *Computer Standards and Interfaces*, **1995**, 17, 585-601	3.5	12
21	Response to the formal specification of safety requirements for storing explosives *Formal Aspects of Computing*, **1994**, 6, 565-568	1.2	3
20	A Formal Semantics of Data Flow Diagrams. *Formal Aspects of Computing*, **1994**, 6, 586-606	1.2	20
19	The IFAD VDM-SL toolbox. *ACM SIGPLAN Notices*, **1994**, 29, 77-80	0.2	55
18	Towards Proof Rules for Looseness in Explicit Definitions from VDM-SL. *Workshops in Computing*, **1994**, 118-134		1
17	Evaluation of underdetermined explicit definitions. *Lecture Notes in Computer Science*, **1994**, 233-250	0.9	2
16	An overview of the ISO/VDM-SL standard. *ACM SIGPLAN Notices*, **1992**, 27, 76-82	0.2	31

15	An executable subset of Meta-IV with loose specification. *Lecture Notes in Computer Science*, **1991**, 604-618	3.9	16
14	The Elements of a Formal Model77-98		
13	Describing System Properties Using Logical Expressions55-76		
12	Constructing a Model13-34		
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5	Using VDM in Practice217-234		
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3	Towards Enabling Overture as a Platform for Formal Notation IDEs. *Electronic Proceedings in Theoretical Computer Science, EPTCS*,187, 14-27		3
2	The Specification Language Server Protocol: A Proposal for Standardised LSP Extensions. *Electronic Proceedings in Theoretical Computer Science, EPTCS*,338, 3-18		
1	A Survey of Practical Formal Methods for Security. *Formal Aspects of Computing*,	1.2	3