Bran Selic

List of Publications by Year
in descending order

49 papers	2,103 citations	623734 14 h-index	434195 31 g-index
52 all docs	52 docs citations	52 times ranked	1419 citing authors

#	Article	IF	Citations
1	Specifying dynamic software system architectures. Software and Systems Modeling, 2021, 20, 595-605.	2.7	4
2	Fixing Classification: A Viewpoint-Based Approach. Lecture Notes in Computer Science, 2021, , 346-356.	1.3	1
3	Towards Facilitating the Exploration of Informal Concepts in Formal Modeling Tools. , 2021, , .		2
4	Controlling the Controllers: What Software People Can Learn From Control Theory. IEEE Software, 2020, 37, 99-103.	1.8	1
5	The Forgotten Interfaces: A Critique of Component-based Models of Computing.. Journal of Object Technology, 2020, 19, 3:1.	0.9	1
6	Modeling of Real-Time Software Systems. , 2020, , 1-74.		0
7	On teaching descriptive and prescriptive modeling. , 2020, , .		2
8	Execution of UML models: a systematic review of research and practice. Software and Systems Modeling, 2019, 18, 2313-2360.	2.7	58
9	Design Languages: A Necessary New Generation of Computer Languages. Lecture Notes in Computer Science, 2018, , 279-294.	1.3	1
10	From (Imperfect) Object Diagrams to (Imperfect) Class Diagrams. , 2018, , .		7
11	Specifying uncertainty in use case models. Journal of Systems and Software, 2018, 144, 573-603.	4.5	27
12	Understanding Uncertainty in Cyber-Physical Systems: A Conceptual Model. Lecture Notes in Computer Science, 2016, , 247-264.	1.3	83
13	Exploring Situation Theory Using InfonLab. , 2015, , .		1
14	Cyber-physical system product line engineering. , 2015, , .		23
15	The Iceberg Effect: On Technology Transfer from Research to Practice. , 2015, , .		5
16	Cost-oriented proactive fault tolerance approach to high performance computing (HPC) in the cloud. International Journal of Parallel, Emergent and Distributed Systems, 2014, 29, 363-378.	1.0	9
17	Modeling Cyber-Physical Systems. , 2014, , 165-179.		14
18	A survey of fault tolerance mechanisms and checkpoint/restart implementations for high performance computing systems. Journal of Supercomputing, 2013, 65, 1302-1326.	3.6	198

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19	Energy Efficient Fault Tolerance for High Performance Computing (HPC) in the Cloud. , 2013, , .		15
20	SimPL: A product-line modeling methodology for families of integrated control systems. Information and Software Technology, 2013, 55, 607-629.	4.4	37
21	What will it take? A view on adoption of model-based methods in practice. Software and Systems Modeling, 2012, 11, 513-526.	2.7	116
22	A Proactive Fault Tolerance Approach to High Performance Computing (HPC) in the Cloud. , 2012, , .		23
23	A Fault Tolerance Framework for High Performance Computing in Cloud. , 2012, , .		38
24	Guest editorial to the special issue on MODELS 2009. Software and Systems Modeling, 2012, 11, 325-326.	2.7	0
25	Making Abstraction Concrete. , 2011, , .		0
26	Evaluation of process level redundant checkpointing/restart for HPC systems. , 2011, , .		0
27	The Theory and Practice of Modeling Language Design for Model-Based Software Engineeringâ€"A Personal Perspective. Lecture Notes in Computer Science, 2011, , 290-321.	1.3	13
28	Extending SysML with AADL Concepts for Comprehensive System Architecture Modeling. Lecture Notes in Computer Science, 2011, , 236-252.	1.3	20
29	6 Modeling Languages for Real-Time and Embedded Systems. Lecture Notes in Computer Science, 2010, , 129-154.	1.3	8
30	Agile Documentation, Anyone?. IEEE Software, 2009, 26, 11-12.	1.8	49
31	New Methods and Tools for Developing Real-Time Software. , 2009, , .		1
32	Challenges in Combining SysML and MARTE for Model-Based Design of Embedded Systems. Lecture Notes in Computer Science, 2009, , 98-113.	1.3	60
33	Personal reflections on automation, programming culture, and model-based software engineering. Automated Software Engineering, 2008, 15, 379-391.	2.9	34
34	A Constrained Executable Model of Dynamic System Reconfiguration. , 2007, , .		1
35	From Model-Driven Development to Model-Driven Engineering. , 2007, , .		22
36	A Systematic Approach to Domain-Specific Language Design Using UML. , 2007, , .		148

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37	Special issue on model transformation. Science of Computer Programming, 2007, 68, 111-113.	1.9	1
38	Domain analysis of dynamic system reconfiguration. Software and Systems Modeling, 2007, 6, 355-380.	2.7	5
39	A Domain Model for Dynamic System Reconfiguration. Lecture Notes in Computer Science, 2005, , 553-567.	1.3	9
40	The pragmatics of model-driven development. IEEE Software, 2003, 20, 19-25.	1.8	827
41	Automated performance modeling of software generated by a design environment. Performance Evaluation, 2001, 45, 107-123.	1.2	36
42	Physical Programming: Beyond Mere Logic. Lecture Notes in Computer Science, 2001, , 1-1.	1.3	1
43	A generic framework for modeling resources with UML. Computer, 2000, 33, 64-69.	1.1	76
44	Turning clockwise. Communications of the ACM, 1999, 42, 46-54.	4.5	61
45	Timing Constraints and Object-Oriented Design. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1999, 32, 39-44.	0.4	2
46	SDL as UML: Why and What Panel. Lecture Notes in Computer Science, 1999, , 446-456.	1.3	1
47	A wideband approach to integrating performance prediction into a software design environment. , 1998, , .		29
48	A Quality of Service Framework for Object-Oriented Architectures. International Journal of Software Engineering and Knowledge Engineering, 1998, 08, 315-331.	0.8	2
49	An Efficient Object-Oriented Variation of the Statecharts Formalism for Distributed Real-Time Systems. , 1993, , 335-344.		22