Atif Mashkoor

List of Publications by Year
in descending order

60 papers	580 citations	687335 13 h-index	752679 20 g-index
63 all docs	63 docs citations	63 times ranked	312 citing authors

#	Article	IF	Citations
1	Software Safety and Security Risk Mitigation in Cyber-physical Systems. IEEE Software, 2018, 35, 24-29.	1.8	82
2	The Hemodialysis Machine Case Study. Lecture Notes in Computer Science, 2016, , 329-343.	1.3	27
3	A Literature Review of Using Machine Learning in Software Development Life Cycle Stages. IEEE Access, 2021, 9, 140896-140920.	4.2	27
4	Evaluating the suitability of state‐based formal methods for industrial deployment. Software - Practice and Experience, 2018, 48, 2350-2379.	3.6	23
5	Utilizing Event-B for domain engineering: a critical analysis. Requirements Engineering, 2011, 16, 191-207.	3.1	21
6	Asm2C++: A Tool for Code Generation from Abstract State Machines to Arduino. Lecture Notes in Computer Science, 2017, , 295-301.	1.3	20
7	Integrating formal methods into medical software development: The ASM approach. Science of Computer Programming, 2018, 158, 148-167.	1.9	20
8	Discovery and classification of user interests on social media. Information Discovery and Delivery, 2017, 45, 130-138.	2.1	19
9	Build Software or Buy: A Study on Developing Large Scale Software. IEEE Access, 2017, 5, 24262-24274.	4.2	17
10	Formal validation and verification of a medical software critical component. , 2015, , .		16
11	Design and validation of a C++ code generator from Abstract State Machines specifications. Journal of Software: Evolution and Process, 2020, 32, e2205.	1.6	16
12	Towards the Trustworthy Development of Active Medical Devices: A Hemodialysis Case Study. IEEE Embedded Systems Letters, 2016, 8, 14-17.	1.9	15
13	A systematic literature review of the use of formal methods in medical software systems. Journal of Software: Evolution and Process, 2018, 30, e1943.	1.6	13
14	Security‐and safety‐critical cyber‐physical systems. Journal of Software: Evolution and Process, 2020, 32, e2239.	1.6	13
15	Improving the Understandability of Formal Specifications: An Experience Report. Lecture Notes in Computer Science, 2014, , 184-199.	1.3	13
16	How to Select the Suitable Formal Method for an Industrial Application: A Survey. Lecture Notes in Computer Science, 2016, , 213-228.	1.3	10
17	Refinement-based Validation of Event-B Specifications. Software and Systems Modeling, 2017, 16, 789-808.	2.7	10
18	Live and global consistency checking in a collaborative engineering environment. , 2019, , .		10

#	Article	IF	Citations
19	Validation Obligations: A Novel Approach to Check Compliance between Requirements and their Formal Specification. , 2021, , .		10
20	Model-driven development of high-assurance active medical devices. Software Quality Journal, 2016, 24, 571-596.	2.2	9
21	Incremental Construction of Realizable Choreographies. Lecture Notes in Computer Science, 2018, , 1-19.	1.3	9
22	Selected functional safety and cybersecurity concerns in system, software, and service process improvement and innovation. Journal of Software: Evolution and Process, 2018, 30, e1955.	1.6	9
23	Generation of C++ Unit Tests from Abstract State Machines Specifications. , 2018, , .		9
24	Collaboratively enhanced consistency checking in a cloud-based engineering environment. , 2019, , .		9
25	Multifaceted Consistency Checking of Collaborative Engineering Artifacts. , 2019, , .		9
26	Formal Probabilistic Analysis of Cyber-Physical Transportation Systems. Lecture Notes in Computer Science, 2012, , 419-434.	1.3	9
27	Domain Engineering with Event-B: Some Lessons We Learned. , 2010, , .		8
28	Stepwise Validation of Formal Specifications. , 2011, , .		8
29	Towards Validation of Requirements Models. Lecture Notes in Computer Science, 2010, , 404-404.	1.3	8
30	Guidelines for Formal Domain Modeling in Event-B. , 2011, , .		7
31	Validation of formal specifications through transformation and animation. Requirements Engineering, 2017, 22, 433-451.	3.1	7
32	Validation of Formal Models by Timed Probabilistic Simulation. Lecture Notes in Computer Science, 2021, , 81-96.	1.3	7
33	Ensuring safe and consistent coengineering of cyberâ€physical production systems: A case study. Journal of Software: Evolution and Process, 2020, 33, e2308.	1.6	6
34	Refinement-Based Development of Software-Controlled Safety-Critical Active Medical Devices. Lecture Notes in Business Information Processing, 2015, , 120-132.	1.0	6
35	Observation-Level-Driven Formal Modeling. , 2015, , .		5
36	Safe and secure cyberâ€physical systems. Journal of Software: Evolution and Process, 2021, 33, e2340.	1.6	5

#	Article	IF	Citations
37	Validation of Transformation from Abstract State Machine Models to C++ Code. Lecture Notes in Computer Science, 2018, , 17-32.	1.3	4
38	Formal design of scalable conversation protocols using Eventâ€B: Validation, experiments, and benchmarks. Journal of Software: Evolution and Process, 2020, 32, e2209.	1.6	4
39	Evaluating the alignment of sequence diagrams with system behavior. Procedia Computer Science, 2021, 180, 502-506.	2.0	4
40	On the effect of incompleteness to check requirement-to-method traces. , 2021, , .		4
41	AsmetaA: Animator for Abstract State Machines. Lecture Notes in Computer Science, 2018, , 369-373.	1.3	4
42	Instant and global consistency checking during collaborative engineering. Software and Systems Modeling, 2022, 21, 2489-2515.	2.7	4
43	Deriving Software Architectures for CRUD Applications: The FPL Tower Interface Case Study. , 2007, , .		3
44	Instant distribution of consistency-relevant change information in a hierarchical multi-developer engineering environment. , 2021, , .		3
45	Timestamp-based Consistency Checking of Collaboratively Developed Engineering Artifacts. , 2021, , .		3
46	Hierarchical Distribution of Consistency-relevant Changes in a Collaborative Engineering Environment. , 2021, , .		3
47	Security Risk Mitigation of Cyber Physical Systems: A Case Study of a Flight Simulator. Communications in Computer and Information Science, 2019, , 129-138.	0.5	3
48	Unified Syntax for Abstract State Machines. Lecture Notes in Computer Science, 2016, , 231-236.	1.3	3
49	Conceptual Modelling of Hybrid Systems. Lecture Notes in Computer Science, 2017, , 277-290.	1.3	3
50	Modelâ€driven engineering of safety and security software systems: A systematic mapping study and future research directions. Journal of Software: Evolution and Process, 2023, 35, .	1.6	3
51	Towards Optimal Assembly Line Order Sequencing with Reinforcement Learning: A Case Study. , 2020, , .		2
52	Formal Verification and Safety Assessment ofÂaÂHemodialysis Machine. Lecture Notes in Computer Science, 2018, , 241-254.	1.3	2
53	Using Probabilistic Analysis for the Certification of Machine Control Systems. Lecture Notes in Computer Science, 2013, , 305-320.	1.3	2
54	Scalable Correct-by-Construction Conversation Protocols with Event-B: Validation, Experiments and Benchmarks. , 2018, , .		1

#	Article	IF	Citations
55	An Event-B-based approach to hybrid systems engineering and its application to a hemodialysis machine case study. Computer Languages, Systems and Structures, 2018, 54, 297-315.	1.4	1
56	A Conceptual Model for Mitigation ofÂRoot Causes of Uncertainty inÂCyber-Physical Systems. Communications in Computer and Information Science, 2021, , 9-17.	0.5	1
57	Team-Oriented Consistency Checking of Heterogeneous Engineering Artifacts. , 2021, , .		1
58	Handling Reparation in Incremental Construction of Realizable Conversation Protocols. Communications in Computer and Information Science, 2018, , 159-166.	0.5	1
59	Analysis of Experiences with the Engineering of a Medical Device Using State-Based Formal Methods. , 2018, , .		0
60	Intelligent Autonomous Systems. Computer, 2020, 53, 20-23.	1.1	0