Petr HnÄ›tynka

List of Publications by Year
in descending order

73 papers	636 citations	1039406 9 h-index	996533 15 g-index
74 all docs	74 docs citations	74 times ranked	351 citing authors

#	Article	IF	Citations
1	Towards Model-driven Fuzzification of Adaptive Systems Specification. , 2022, , .		0
2	Managing latency in edgeâ€“cloud environment. Journal of Systems and Software, 2021, 172, 110872.	3.3	8
3	Modeling Data Flow Constraints for Design-Time Confidentiality Analyses. , 2021, , .		6
4	Targeting uncertainty in smart CPS by confidence-based logic. Journal of Systems and Software, 2021, 181, 111065.	3.3	1
5	Self-adaptive K8S Cloud Controller for Time-sensitive Applications. , 2021, , .		5
6	Aspect-Oriented Adaptation of Access Control Rules. , 2021, , .		1
7	IVIS: Highly customizable framework for visualization and processing of IoT data. , 2020, , .		4
8	QRML: A Component Language and Toolset for Quality and Resource Management. , 2020, , .		5
9	Toward autonomically composable and context-dependent access control specification through ensembles. International Journal on Software Tools for Technology Transfer, 2020, 22, 511-522.	1.7	6
10	A language and framework for dynamic component ensembles in smart systems. International Journal on Software Tools for Technology Transfer, 2020, 22, 497-509.	1.7	18
11	Using component ensembles for modeling autonomic component collaboration in smart farming. , 2020, , .		5
12	Forming Ensembles at Runtime: A Machine Learning Approach. Lecture Notes in Computer Science, 2020, , 440-456.	1.0	4
13	Capturing Dynamicity and Uncertainty in Security and Trust via Situational Patterns. Lecture Notes in Computer Science, 2020, , 295-310.	1.0	4
14	Dynamic security rules for legacy systems. , 2019, , .		7
15	Experimenting with Adaptation in Smart Cyber-Physical Systems: A Model Problem and Testbed. , 2019, , 149-169.		1
16	Modeling of dynamic trust contracts for industry 4.0 systems. , 2018, , .		9
17	Guaranteed latency applications in edge-cloud environment. , 2018, , .		2
18	A Virtual Playground for Testing Smart Cyber-Physical Systems. , 2018, , .		1

#	ARTICLE	IF	CITATIONS
19	Dynamic Security Specification Through Autonomic Component Ensembles. Lecture Notes in Computer Science, 2018, , 172-185.	1.0	5
20	Strengthening Adaptation in Cyber-Physical Systems via Meta-Adaptation Strategies. ACM Transactions on Cyber-Physical Systems, 2017, 1, 1-25.	1.9	12
21	Intelligent Ensembles - A Declarative Group Description Language and Java Framework. , 2017, , .		10
22	Automated Dynamic Formation of Component Ensembles - Taking Advantage of Component Cooperation Locality. , 2017, , .		3
23	Model problem and testbed for experiments with adaptation in smart cyber-physical systems. , 2016, , .		5
24	Smart Coordination of Autonomic Component Ensembles in the Context of Ad-Hoc Communication. Lecture Notes in Computer Science, 2016, , 642-656.	1.0	2
25	Statistical Approach to Architecture Modes in Smart Cyber Physical Systems. , 2016, , .		5
26	Self-adaptation in software-intensive cyberâ€“physical systems: From system goals to architecture configurations. Journal of Systems and Software, 2016, 122, 378-397.	3.3	41
27	Formal Verification of Annotated Textual Use-Cases. Computer Journal, 2015, 58, 1495-1529.	1.5	4
28	Towards Intelligent Ensembles. , 2015, , .		7
29	Verification of Use-Cases with FOAM Tool in Context of Cloud Providers. , 2015, , .		1
30	A Method for Semi-automated Generation of Test Scenarios Based on Use Cases. , 2015, , .		4
31	An Architecture Framework for Experimentations with Self-Adaptive Cyber-physical Systems. , 2015, , .		26
32	The Invariant Refinement Method. Lecture Notes in Computer Science, 2015, , 405-428.	1.0	11
33	Meta-Adaptation Strategies for Adaptation in Cyber-Physical Systems. Lecture Notes in Computer Science, 2015, , 45-52.	1.0	7
34	Strengthening architectures of smart CPS by modeling them as runtime product-lines. , 2014, , .		11
35	DEECo: an ecosystem for cyber-physical systems. , 2014, , .		6
36	Comparison of component frameworks for real-time embedded systems. Knowledge and Information Systems, 2014, 40, 127-170.	2.1	12

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37	Automated resolution of connector architectures using constraint solving (ARCAS method). Software and Systems Modeling, 2014, 13, 843-872.	2.2	3
38	Gossiping Components for Cyber-Physical Systems. Lecture Notes in Computer Science, 2014, , 250-266.	1.0	9
39	Recovering Traceability Links Between Code and Specification Through Domain Model Extraction. Lecture Notes in Business Information Processing, 2014, , 187-201.	0.8	2
40	Interoperable domainâ€specific languages families for code generation. Software - Practice and Experience, 2013, 43, 479-499.	2.5	2
41	SOFA 2 Component Framework and Its Ecosystem. Electronic Notes in Theoretical Computer Science, 2013, 295, 101-106.	0.9	8
42	DEECO. , 2013, , .		76
43	Position paper. , 2013, , .		3
44	Design of ensemble-based component systems by invariant refinement. , 2013, , .		14
45	FOAM: A Lightweight Method for Verification of Use-Cases. , 2012, , .		2
46	Verifying Temporal Properties of Use-Cases in Natural Language. Lecture Notes in Computer Science, 2012, , 350-367.	1.0	3
47	CoDIT: Bridging the Gap between System-Level and Component-Level Development. Studies in Computational Intelligence, 2012, , 159-175.	0.7	0
48	Introducing Support for Embedded and Real-Time Devices into Existing Hierarchical Component System: Lessons Learned. , 2011, , .		2
49	Extensible Polyglot Programming Support in Existing Component Frameworks. , 2011, , .		0
50	Using meta-modeling in design and implementation of component-based systems: the SOFA case study. Software - Practice and Experience, 2011, 41, 1185-1201.	2.5	4
51	Comparing the Service Component Architecture and Fractal Component Model. Computer Journal, 2011, 54, 1026-1037.	1.5	11
52	Automated Generation of Implementation from Textual System Requirements. Lecture Notes in Computer Science, 2011, , 34-47.	1.0	7
53	Comparison of Component Frameworks for Real-Time Embedded Systems. Lecture Notes in Computer Science, 2010, , 21-36.	1.0	23
54	From Textual Use-Cases to Component-Based Applications. Studies in Computational Intelligence, 2010, , 23-37.	0.7	5

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55	Using a product line for creating component systems. , 2009, , .		5
56	Bridging the Component-Based and Service-Oriented Worlds. , 2009, , .		1
57	JavaCompExt: Extracting Architectural Elements from Java Source Code. , 2009, , .		4
58	Supporting Real-Life Applications in Hierarchical Component Systems. Studies in Computational Intelligence, 2009, , 107-118.	0.7	3
59	Using Connectors to Address Transparent Distribution in Enterprise Systems â€“ Pitfalls and Options. Studies in Computational Intelligence, 2009, , 81-92.	0.7	0
60	Experience with MOF-Based Meta-modeling of Component-Based Systems. Communications in Computer and Information Science, 2009, , 43-54.	0.4	0
61	The Power of MOF-Based Meta-modeling of Components. , 2008, , .		0
62	Keynote Address Two. , 2008, , .		0
63	Perspectives in component-based software engineering. , 2008, , .		2
64	Using DSL for Automatic Generation of Software Connectors. , 2008, , .		4
65	CoCoME in SOFA. Lecture Notes in Computer Science, 2008, , 388-417.	1.0	10
66	Preserving Intentions in SOA Business Process Development. Studies in Computational Intelligence, 2008, , 59-72.	0.7	0
67	Runtime Support for Advanced Component Concepts. , 2007, , .		6
68	A Message from Conference Chairs. , 2007, , .		0
69	SOFA 2.0: Balancing Advanced Features in a Hierarchical Component Model. , 2006, , .		122
70	A model-driven environment for component deployment. , 2005, , .		4
71	Fighting Class Name Clashes in Java Component Systems. Lecture Notes in Computer Science, 2003, , 106-109.	1.0	6
72	Hand-written vs. MOF-based metadata repositories: the SOFA experience. , 0, , .		5

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73	Towards an Automated Requirements-driven Development of Smart Cyber-Physical Systems. Electronic Proceedings in Theoretical Computer Science, EPTCS, 0, 205, 59-68.	0.8	1