

# Robert Lagerström

## List of Publications by Year in descending order

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Version: 2024-02-01

89  
papers

1,400  
citations

516215

16  
h-index

476904

29  
g-index

91  
all docs

91  
docs citations

91  
times ranked

614  
citing authors

#	ARTICLE	IF	CITATIONS
1	Cyber security threat modeling based on the MITRE Enterprise ATT&CK Matrix. Software and Systems Modeling, 2022, 21, 157-177.	2.2	47
2	Two decades of cyberattack simulations: A systematic literature review. Computers and Security, 2022, 116, 102681.	4.0	7
3	VehicleLang: A probabilistic modeling and simulation language for modern vehicle IT infrastructures. Computers and Security, 2022, 117, 102705.	4.0	9
4	Enhancing Cyber Security of LoRaWAN Gateways under Adversarial Attacks. Sensors, 2022, 22, 3498.	2.1	9
5	Ethical Principles for Designing Responsible Offensive Cyber Security Training. IFIP Advances in Information and Communication Technology, 2021, , 21-39.	0.5	1
6	A Method for Assigning Probability Distributions in Attack Simulation Languages. Complex Systems Informatics and Modeling Quarterly, 2021, , 55-77.	0.5	5
7	Integrating Security Behavior into Attack Simulations. , 2021, , .		5
8	Research communities in cyber security: A comprehensive literature review. Computer Science Review, 2021, 42, 100431.	10.2	12
9	Correction to: A Systematic Literature Review of Information Sources for Threat Modeling in the Power Systems Domain. Lecture Notes in Computer Science, 2021, , C1-C1.	1.0	0
10	Anomaly-based Intrusion Detection using Tree Augmented Naive Bayes. , 2021, , .		4
11	Towards Automated Attack Simulations of BPMN-based Processes. , 2021, , .		4
12	Attacking Websites Using HTTP Request Smuggling: Empirical Testing of Servers and Proxies. , 2021, , .		3
13	Threat Modeling and Attack Simulations of Connected Vehicles: Proof of Concept. Communications in Computer and Information Science, 2020, , 272-287.	0.4	3
14	A Systematic Literature Review of Information Sources for Threat Modeling in the Power Systems Domain. Lecture Notes in Computer Science, 2020, , 47-58.	1.0	4
15	An Attack Simulation Language for the IT Domain. Lecture Notes in Computer Science, 2020, , 67-86.	1.0	20
16	powerLang: a probabilistic attack simulation language for the power domain. Energy Informatics, 2020, 3, .	1.4	18
17	Automating threat modeling using an ontology framework. Cybersecurity, 2020, 3, .	3.1	17
18	Threat Modeling and Attack Simulations of Smart Cities: A Literature Review and Explorative Study. , 2020, , .		2

#	ARTICLE	IF	CITATIONS
19	Securing IoT Devices using Geographic and Continuous Login Blocking: A Honeypot Study. , 2020, , .		0
20	Threat modeling “ A systematic literature review. Computers and Security, 2019, 84, 53-69.	4.0	122
21	Threat Modeling of Connected Vehicles: A privacy analysis and extension of vehicleLang. , 2019, , .		3
22	Creating Meta Attack Language Instances using ArchiMate: Applied to Electric Power and Energy System Cases. , 2019, , .		15
23	Re-using Enterprise Architecture Repositories for Agile Threat Modeling. , 2019, , .		5
24	A Study of Security Vulnerabilities and Software Weaknesses in Vehicles. Lecture Notes in Computer Science, 2019, , 204-218.	1.0	9
25	Probabilistic Modeling and Simulation of Vehicular Cyber Attacks: An Application of the Meta Attack Language. , 2019, , .		18
26	Threat Modeling and Attack Simulations of Connected Vehicles: A Research Outlook. , 2019, , .		11
27	Conceptual Abstraction of Attack Graphs Use Case of securiCAD. Lecture Notes in Computer Science, 2019, , 186-202.	1.0	3
28	A Methodology for Operationalizing Enterprise IT Architecture and Evaluating its Modifiability. Complex Systems Informatics and Modeling Quarterly, 2019, , 75-98.	0.5	2
29	A Framework for Automatic IT Architecture Modeling: Applying Truth Discovery. Complex Systems Informatics and Modeling Quarterly, 2019, , 20-56.	0.5	3
30	Can the Common Vulnerability Scoring System be Trusted? A Bayesian Analysis. IEEE Transactions on Dependable and Secure Computing, 2018, 15, 1002-1015.	3.7	60
31	Load balancing of renewable energy: a cyber security analysis. Energy Informatics, 2018, 1, .	1.4	14
32	Enterprise Architecture and Agile Development: Friends or Foes?. , 2018, , .		14
33	A Meta Language for Threat Modeling and Attack Simulations. , 2018, , .		59
34	Quantitative Information Security Risk Estimation Using Probabilistic Attack Graphs. Lecture Notes in Computer Science, 2017, , 37-52.	1.0	3
35	Analyzing the Effectiveness of Attack Countermeasures in a SCADA System. , 2017, , .		12
36	Software Architecture Decoupling at Ericsson. , 2017, , .		2

#	ARTICLE	IF	CITATIONS
37	A Study on Software Vulnerabilities and Weaknesses of Embedded Systems in Power Networks. , 2017, , .		8
38	In-Depth Modeling of the UNIX Operating System for Architectural Cyber Security Analysis. , 2017, , .		4
39	Automatic Design of Secure Enterprise Architecture: Work in Progress Paper. , 2017, , .		2
40	Exploring the Relationship Between Architecture Coupling and Software Vulnerabilities. Lecture Notes in Computer Science, 2017, , 53-69.	1.0	12
41	Designing an Agile Software Portfolio Architecture: The Impact of Coupling on Performance. Proceedings - Academy of Management, 2017, 2017, 17511.	0.0	1
42	Product feature prioritization using the Hidden Structure method: A practical case at Ericsson. , 2016, , .		2
43	pwnPr3d: An Attack-Graph-Driven Probabilistic Threat-Modeling Approach. , 2016, , .		25
44	Bridging the gap between business and technology in strategic decision-making for cyber security management. , 2016, , .		1
45	Automated architecture modeling for enterprise technology manageme using principles from data fusion: A security analysis case. , 2016, , .		9
46	Technology management through architecture reference models: A smart metering case. , 2016, , .		4
47	Automatic Probabilistic Enterprise IT Architecture Modeling: A Dynamic Bayesian Networks Approach. , 2016, , .		11
48	Time between vulnerability disclosures: A measure of software product vulnerability. Computers and Security, 2016, 62, 278-295.	4.0	29
49	Modeling and analyzing systems-of-systems in the multi-attribute prediction language (MAPL). , 2016, , .		4
50	Analyzing attack resilience of an advanced meter infrastructure reference model. , 2016, , .		2
51	Modeling Enterprise Authorization: A Unified Metamodel and Initial Validation. Complex Systems Informatics and Modeling Quarterly, 2016, , 1-24.	0.5	7
52	Search-Based Design of Large Software Systems-of-Systems. , 2015, , .		0
53	Securi CAD by Foreseeti: A CAD Tool for Enterprise Cyber Security Management. , 2015, , .		33
54	A Requirements Based Approach for Automating Enterprise IT Architecture Modeling Using Multiple Data Sources. , 2015, , .		15

#	ARTICLE	IF	CITATIONS
55	Revealing Hidden Structures in Organizational Transformation – A Case Study. Lecture Notes in Business Information Processing, 2015, , 327-338.	0.8	2
56	Extending a general theory of software to engineering. , 2014, , .		3
57	Automatic data collection for enterprise architecture models. Software and Systems Modeling, 2014, 13, 825-841.	2.2	51
58	Quantifying Success Factors for IT Projects – An Expert-Based Bayesian Model. Information Systems Management, 2014, 31, 21-36.	3.2	42
59	Visualizing and Measuring Enterprise Application Architecture: An Exploratory Telecom Case. , 2014, , .		20
60	Enterprise Architecture Evaluation Using Utility Theory. , 2013, , .		13
61	Increasing software development efficiency and maintainability for complex industrial systems – A case study. Journal of Software: Evolution and Process, 2013, 25, 285-301.	1.2	0
62	Visualizing and Measuring Enterprise Architecture: An Exploratory BioPharma Case. Lecture Notes in Business Information Processing, 2013, , 9-23.	0.8	16
63	Assessing Modifiability in Application Services Using Enterprise Architecture Models – A Case Study. Lecture Notes in Business Information Processing, 2012, , 162-181.	0.8	3
64	Identifying factors affecting software development cost and productivity. Software Quality Journal, 2012, 20, 395-417.	1.4	27
65	Enterprise Architecture Management's Impact on Information Technology Success. , 2011, , .		18
66	Analysis of IT/Business Alignment Situations as a Precondition for the Design and Engineering of Situated IT/Business Alignment Solutions. , 2011, , .		10
67	A Tool for Enterprise Architecture Analysis Using the PRM Formalism. Lecture Notes in Computer Science, 2011, , 108-121.	1.0	30
68	Architecture analysis of enterprise systems modifiability: a metamodel for software change cost estimation. Software Quality Journal, 2010, 18, 437-468.	1.4	20
69	Architecture analysis of enterprise systems modifiability – Models, analysis, and validation. Journal of Systems and Software, 2010, 83, 1387-1403.	3.3	45
70	Trends in Enterprise Architecture Practice – A Survey. Lecture Notes in Business Information Processing, 2010, , 16-29.	0.8	12
71	Mapping the Substation Configuration Language of IEC 61850 to ArchiMate. , 2010, , .		11
72	Enterprise Architecture Meta Models for IT/Business Alignment Situations. , 2010, , .		61

#	ARTICLE	IF	CITATIONS
73	Data Collection Prioritization for System Quality Analysis. <i>Electronic Notes in Theoretical Computer Science</i> , 2009, 233, 29-42.	0.9	21
74	EAF2- A Framework for Categorizing Enterprise Architecture Frameworks. , 2009, , .		25
75	A Tool for Enterprise Architecture Analysis of Maintainability. , 2009, , .		13
76	A formal method for cost and accuracy trade-off analysis in software assessment measures. , 2009, , .		1
77	Decision support oriented Enterprise Architecture metamodel management using classification trees. , 2009, , .		5
78	A Method for Choosing Software Assessment Measures Using Bayesian Networks and Diagnosis. , 2009, , .		2
79	Enterprise Meta Modeling Methods “ Combining a Stakeholder-Oriented and a Causality-Based Approach. <i>Lecture Notes in Business Information Processing</i> , 2009, , 381-393.	0.8	16
80	Using Architectural Models to Predict the Maintainability of Enterprise Systems. <i>Software Maintenance and Reengineering (CSMR)</i> , Proceedings of the European Conference on, 2008, , .	0.0	17
81	A framework for interoperability analysis on the semantic web using architecture models. , 2008, , .		0
82	A Framework for Service Interoperability Analysis using Enterprise Architecture Models. , 2008, , .		23
83	A Bayesian network for IT governance performance prediction. , 2008, , .		14
84	A Framework for Assessing Business Value of Service Oriented Architectures. , 2007, , .		3
85	Enterprise architecture analysis with extended influence diagrams. <i>Information Systems Frontiers</i> , 2007, 9, 163-180.	4.1	125
86	Extended Influence Diagrams for System Quality Analysis. <i>Journal of Software</i> , 2007, 2, .	0.6	18
87	Extended Influence Diagrams for Enterprise Architecture Analysis. 2006 10th IEEE International Enterprise Distributed Object Computing Conference (EDOC'06), 2006, , .	0.0	25
88	Designing an Agile Software Portfolio Architecture: The Impact of Coupling on Performance. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
89	A Methodology for Operationalizing Enterprise Architecture and Evaluating Enterprise IT Flexibility. <i>SSRN Electronic Journal</i> , 0, , .	0.4	8