

# Erkki MÄäkinen

## List of Publications by Year in descending order

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Version: 2024-02-01

88  
papers

778  
citations

623188

14  
h-index

642321

23  
g-index

89  
all docs

89  
docs citations

89  
times ranked

427  
citing authors

#	ARTICLE	IF	CITATIONS
1	Automatic synthesis of state machines from trace diagrams. <i>Software - Practice and Experience</i> , 1994, 24, 643-658.	2.5	68
2	Constructing and Reconstructing the Reorderable Matrix. <i>Information Visualization</i> , 2005, 4, 32-48.	1.2	51
3	How to draw a hypergraph. <i>International Journal of Computer Mathematics</i> , 1990, 34, 177-185.	1.0	49
4	A Neural Network Model to Minimize the Connected Dominating Set for Self-Configuration of Wireless Sensor Networks. <i>IEEE Transactions on Neural Networks</i> , 2009, 20, 973-982.	4.8	47
5	TREE COMPRESSION AND OPTIMIZATION WITH APPLICATIONS. <i>International Journal of Foundations of Computer Science</i> , 1990, 01, 425-447.	0.8	35
6	On the subtree isomorphism problem for ordered trees. <i>Information Processing Letters</i> , 1989, 32, 271-273.	0.4	24
7	The grammatical inference problem for the Szilard languages of linear grammars. <i>Information Processing Letters</i> , 1990, 36, 203-206.	0.4	24
8	Genetic Synthesis of Software Architecture. <i>Lecture Notes in Computer Science</i> , 2008, , 565-574.	1.0	24
9	On the rotation distance of binary trees. <i>Information Processing Letters</i> , 1988, 26, 271-272.	0.4	23
10	Learning deterministic even linear languages from positive examples. <i>Theoretical Computer Science</i> , 1997, 185, 63-79.	0.5	22
11	On circular layouts. <i>International Journal of Computer Mathematics</i> , 1988, 24, 29-37.	1.0	20
12	Experiments on drawing 2-level hierarchical graphs. <i>International Journal of Computer Mathematics</i> , 1990, 36, 175-181.	1.0	19
13	On the structural grammatical inference problem for some classes of context-free grammars. <i>Information Processing Letters</i> , 1992, 42, 1-5.	0.4	16
14	Generating random binary trees – A survey. <i>Information Sciences</i> , 1999, 115, 123-136.	4.0	16
15	On a parallel machine scheduling problem with precedence constraints. <i>Journal of Scheduling</i> , 2006, 9, 493-495.	1.3	15
16	Parallelisation of genetic algorithms for the 2-page crossing number problem. <i>Journal of Parallel and Distributed Computing</i> , 2007, 67, 229-241.	2.7	15
17	Generating software architecture spectrum with multi-objective genetic algorithms. , 2011, ,		15
18	Left distance binary tree representations. <i>BIT Numerical Mathematics</i> , 1987, 27, 163-169.	1.0	13

#	ARTICLE	IF	CITATIONS
19	Genetic algorithms for drawing bipartite graphs. International Journal of Computer Mathematics, 1994, 53, 157-166.	1.0	12
20	A NOTE ON THE GRAMMATICAL INFERENCE PROBLEM FOR EVEN LINEAR LANGUAGES. Fundamenta Informaticae, 1996, 25, 175-181.	0.3	12
21	Genetic algorithms for the 2-page book drawing problem of graphs. Journal of Heuristics, 2007, 13, 77-93.	1.1	11
22	Empirical study on the effect of crossover in genetic software architecture synthesis. , 2009, , .		11
23	Complementary crossover for genetic software architecture synthesis. , 2010, , .		11
24	Task-oriented distributed data fusion in autonomous wireless sensor networks. Soft Computing, 2015, 19, 2305-2319.	2.1	10
25	A review on objective measurement of usage in technology acceptance studies. Universal Access in the Information Society, 2016, 15, 713-726.	2.1	10
26	On context-free and Szilard languages. BIT Numerical Mathematics, 1984, 24, 164-170.	1.0	9
27	On inferring linear single-tree languages. Information Processing Letters, 2000, 73, 1-3.	0.4	9
28	An Improved Neural Network Model for the Two-Page Crossing Number Problem. IEEE Transactions on Neural Networks, 2006, 17, 1642-1646.	4.8	9
29	Scenario-Based Genetic Synthesis of Software Architecture. , 2009, , .		9
30	Searching neural network structures with L systems and genetic algorithms. International Journal of Computer Mathematics, 1999, 73, 55-75.	1.0	8
31	Experiments on drawing 2-level hierarchical graphs. International Journal of Computer Mathematics, 1990, 37, 129-135.	1.0	7
32	On Derivation Languages of a Class of Splicing Systems. Acta Cybernetica, 2018, 23, 981-993.	0.5	7
33	Synthesizing Architecture from Requirements: A Genetic Approach. , 2011, , 307-331.		7
34	On permutative grammars generating context-free languages. BIT Numerical Mathematics, 1985, 25, 604-610.	1.0	6
35	Constructing a binary tree from its traversals. BIT Numerical Mathematics, 1989, 29, 572-575.	1.0	6
36	A programming project. SIGCSE Bulletin, 1995, 27, 34-38.	0.1	6

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37	Classes of Szilard Languages in NC <sup>1</sup> . , 2009, , .		6
38	On some derivation mechanisms and the complexity of their Szilard languages. Theoretical Computer Science, 2014, 537, 87-96.	0.5	6
39	Three New Algorithms for Regular Language Enumeration. Lecture Notes in Computer Science, 2009, , 178-191.	1.0	6
40	A note on pure grammars. Information Processing Letters, 1986, 23, 271-274.	0.4	5
41	Inferring uniquely terminating regular languages from positive data. Information Processing Letters, 1997, 62, 57-60.	0.4	5
42	On the longest upsequence problem for permutations. International Journal of Computer Mathematics, 2001, 77, 45-53.	1.0	5
43	Minimally adequate teacher synthesizes statechart diagrams. Acta Informatica, 2002, 38, 235-259.	0.5	5
44	On accepting smart environments at user and societal levels. Universal Access in the Information Society, 2014, 13, 449-469.	2.1	5
45	On homomorphic images of szilard languages. International Journal of Computer Mathematics, 1986, 18, 239-245.	1.0	4
46	On top-down splaying. BIT Numerical Mathematics, 1987, 27, 330-339.	1.0	4
47	On linear search heuristics. Information Processing Letters, 1988, 29, 35-36.	0.4	4
48	Inferring regular languages by merging nonterminals. International Journal of Computer Mathematics, 1999, 70, 601-616.	1.0	4
49	Automated compression of state machines using UML statechart diagram notation. Information and Software Technology, 2002, 44, 565-578.	3.0	4
50	One- and two-page crossing numbers for some types of graphs. International Journal of Computer Mathematics, 2010, 87, 1667-1679.	1.0	4
51	On the Complexity of Szilard Languages of Matrix Grammars. , 2011, , .		4
52	Simulated Annealing for Aiding Genetic Algorithm in Software Architecture Synthesis. Acta Cybernetica, 2013, 21, 235-265.	0.5	4
53	A Note on the Median Heuristic for Drawing Bipartite Graphs. Fundamenta Informaticae, 1989, 12, 563-569.	0.3	4
54	Remarks on the structural grammatical inference problem for context-free grammars. Information Processing Letters, 1992, 44, 125-127.	0.4	3

#	ARTICLE	IF	CITATIONS
55	Remarks on the thickness of a graph. Information Sciences, 1998, 108, 1-4.	4.0	3
56	Constructing a binary tree efficiently from its traversals. International Journal of Computer Mathematics, 2000, 75, 143-147.	1.0	3
57	A genetic algorithm for determining the thickness of a graph. Information Sciences, 2001, 138, 155-164.	4.0	3
58	An Annotated Bibliography on the Thickness, Outerthickness, and Arboricity of a Graph. Missouri Journal of Mathematical Sciences, 2012, 24, .	0.3	3
59	A note on depth-first derivations. BIT Numerical Mathematics, 1985, 25, 293-296.	1.0	2
60	On the relationship between diagram synthesis and grammatical inference erkki makinen. International Journal of Computer Mathematics, 1994, 52, 129-137.	1.0	2
61	A family of languages which is polynomial-time learnable from positive data in pitt's sense. International Journal of Computer Mathematics, 1996, 61, 175-179.	1.0	2
62	Ranking and unranking left szilard languages. International Journal of Computer Mathematics, 1998, 68, 29-38.	1.0	2
63	Synchronized extension systems. Acta Informatica, 2001, 37, 449-465.	0.5	2
64	The Complexity of Szilard Languages of Matrix Grammars Revisited. Fundamenta Informaticae, 2013, 123, 381-399.	0.3	2
65	Various heuristic algorithms to minimise the two-page crossing numbers of graphs. Open Computer Science, 2015, 5, 22-40.	1.3	2
66	Techniques for Genetic Software Architecture Design. Computer Journal, 2015, 58, 3141-3170.	1.5	2
67	On the Complexity of Szilard Languages of Regulated Grammars. Lecture Notes in Computer Science, 2011, , 77-94.	1.0	2
68	On derivation preservation. Information Processing Letters, 1984, 19, 225-228.	0.4	1
69	An undecidable problem for context-free grammars. Information Processing Letters, 1985, 20, 141-142.	0.4	1
70	A note on the inclusion problem for szilard languages. International Journal of Computer Mathematics, 1987, 21, 291-295.	1.0	1
71	A linear time and space algorithm for finding isomorphic subtrees of a binary tree. BIT Numerical Mathematics, 1991, 31, 353-357.	1.0	1
72	On homomorphic images of left szilard languages. International Journal of Computer Mathematics, 1992, 46, 131-135.	1.0	1

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73	On drawing regular bipartite graphs. International Journal of Computer Mathematics, 1992, 43, 39-43.	1.0	1
74	Pattern Ambiguities for Pure Context-Free Grammars. Fundamenta Informaticae, 1997, 30, 183-191.	0.3	1
75	A note on synchronized extension systems. Information Processing Letters, 2001, 79, 7-9.	0.4	1
76	Multi-objective genetic synthesis of software architecture. , 2011, , .		1
77	On Pure Context-Free Languages and Left Szilard Languages. Fundamenta Informaticae, 1991, 15, 86-89.	0.3	1
78	Boundedness testing for unambiguous context-free grammars. Information Processing Letters, 1983, 17, 181-183.	0.4	0
79	A note on undercover relation. Information Processing Letters, 1985, 20, 19-21.	0.4	0
80	Splay trees as priority queues. International Journal of Computer Mathematics, 1989, 31, 55-62.	1.0	0
81	(0,1)-TOTALITY IS UNDECIDABLE FOR ARBITRARY CONTEXT-FREE GRAMMARS. Fundamenta Informaticae, 1996, 27, 413-415.	0.3	0
82	Programming projects on chess. SIGCSE Bulletin, 1996, 28, 41-44.	0.1	0
83	Restricted universe data structures. SIGCSE Bulletin, 2000, 32, 22-24.	0.1	0
84	Task-oriented Distributed Information Fusion in Wireless Sensor Networks. , 2012, , .		0
85	A Hierarchy of Context-Free Derivations. Fundamenta Informaticae, 1991, 14, 255-259.	0.3	0
86	On the Generative Capacity of Context-Free Matrix Grammars over One-Letter Alphabet. Fundamenta Informaticae, 1992, 16, 93-97.	0.3	0
87	On Grammatical Inference and Derivational Complexity of Context-Free Grammars. Fundamenta Informaticae, 1992, 17, 363-368.	0.3	0
88	A Note on the Emptiness of Intersection Problem for Left Szilard Languages. Acta Cybernetica, 2016, 22, 613-616.	0.5	0