

# Daniel Lemire

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8763631/publications.pdf>

Version: 2024-02-01

64  
papers

1,977  
citations

377584

21  
h-index

371746

37  
g-index

65  
all docs

65  
docs citations

65  
times ranked

1687  
citing authors

#	ARTICLE	IF	CITATIONS
1	Binary Fuse Filters: Fast and Smaller Than Xor Filters. Journal of Experimental Algorithmics, 2022, 27, 1-15.	0.7	3
2	Validating UTF-8 in less than one instruction per byte. Software - Practice and Experience, 2021, 51, 950-964.	2.5	5
3	Efficient computation of positional population counts using SIMD instructions. Concurrency Computation Practice and Experience, 2021, 33, e6304.	1.4	0
4	Number parsing at a gigabyte per second. Software - Practice and Experience, 2021, 51, 1700-1727.	2.5	5
5	Integer division by constants: optimal bounds. Heliyon, 2021, 7, e07442.	1.4	2
6	Base64 encoding and decoding at almost the speed of a memory copy. Software - Practice and Experience, 2020, 50, 89-97.	2.5	4
7	Xor Filters. Journal of Experimental Algorithmics, 2020, 25, 1-16.	0.7	45
8	Parsing gigabytes of JSON per second. VLDB Journal, 2019, 28, 941-960.	2.7	32
9	Faster remainder by direct computation: Applications to compilers and software libraries. Software - Practice and Experience, 2019, 49, 953-970.	2.5	13
10	Fast Random Integer Generation in an Interval. ACM Transactions on Modeling and Computer Simulation, 2019, 29, 1-12.	0.6	22
11	New method for denoising borehole transient electromagnetic data with discrete wavelet transform. Journal of Applied Geophysics, 2019, 168, 41-48.	0.9	16
12	Xorshift1024*, xorshift1024+, xorshift128+ and xoroshiro128+ fail statistical tests for linearity. Journal of Computational and Applied Mathematics, 2019, 350, 139-142.	1.1	8
13	On Desirable Semantics of Functional Dependencies over Databases with Incomplete Information. Fundamenta Informaticae, 2018, 158, 327-352.	0.3	0
14	Roaring bitmaps: Implementation of an optimized software library. Software - Practice and Experience, 2018, 48, 867-895.	2.5	31
15	Full Solution Indexing for Top-K Web Service Composition. IEEE Transactions on Services Computing, 2018, 11, 521-533.	3.2	10
16	Stream VByte : Faster byte-oriented integer compression. Information Processing Letters, 2018, 130, 1-6.	0.4	28
17	Faster Population Counts Using AVX2 Instructions. Computer Journal, 2018, 61, 111-120.	1.5	29
18	Apache Calcite. , 2018, , .		73

#	ARTICLE	IF	CITATIONS
19	Faster Base64 Encoding and Decoding Using AVX2 Instructions. ACM Transactions on the Web, 2018, 12, 1-26.	2.0	12
20	Regular and almost universal hashing: an efficient implementation. Software - Practice and Experience, 2017, 47, 1299-1323.	2.5	3
21	Upscaledb: Efficient integer-key compression in a key-value store using SIMD instructions. Information Systems, 2017, 66, 13-23.	2.4	6
22	Better bitmap performance with Roaring bitmaps. Software - Practice and Experience, 2016, 46, 709-719.	2.5	96
23	Consistently faster and smaller compressed bitmaps with Roaring. Software - Practice and Experience, 2016, 46, 1547-1569.	2.5	30
24	Compressed bitmap indexes: beyond unions and intersections. Software - Practice and Experience, 2016, 46, 167-198.	2.5	9
25	SIMD compression and the intersection of sorted integers. Software - Practice and Experience, 2016, 46, 723-749.	2.5	59
26	Scaling Up Web Service Composition with the Skyline Operator. , 2016, , .		11
27	Optimizing Druid with Roaring bitmaps. , 2016, , .		12
28	Faster 64-bit universal hashing using carry-less multiplications. Journal of Cryptographic Engineering, 2016, 6, 171-185.	1.5	15
29	A General SIMD-Based Approach to Accelerating Compression Algorithms. ACM Transactions on Information Systems, 2015, 33, 1-28.	3.8	26
30	Bloofi: Multidimensional Bloom filters. Information Systems, 2015, 54, 311-324.	2.4	34
31	Functional Dependencies with null Markers. Computer Journal, 2015, 58, 1160-1168.	1.5	5
32	Measuring academic influence: Not all citations are equal. Journal of the Association for Information Science and Technology, 2015, 66, 408-427.	1.5	159
33	A Web Service Composition Method Based on Compact K2-Trees. , 2015, , .		4
34	Decoding billions of integers per second through vectorization. Software - Practice and Experience, 2015, 45, 1-29.	2.5	178
35	An Analysis Tool for the Contextual Information from Field Experiments on Driving Fatigue. Lecture Notes in Computer Science, 2015, , 172-185.	1.0	2
36	Strongly Universal String Hashing is Fast. Computer Journal, 2014, 57, 1624-1638.	1.5	12

#	ARTICLE	IF	CITATIONS
37	Full Solution Indexing Using Database for QoS-Aware Web Service Composition. , 2014, , .		9
38	Diamond dicing. Data and Knowledge Engineering, 2013, 86, 1-18.	2.1	2
39	Reordering rows for better compression. ACM Transactions on Database Systems, 2012, 37, 1-29.	1.5	20
40	Time series classification by class-specific Mahalanobis distance measures. Advances in Data Analysis and Classification, 2012, 6, 185-200.	0.9	23
41	Changing computational research. The challenges ahead. Source Code for Biology and Medicine, 2012, 7, 2.	1.7	8
42	The universality of iterated hashing over variable-length strings. Discrete Applied Mathematics, 2012, 160, 604-617.	0.5	6
43	Reordering columns for smaller indexes. Information Sciences, 2011, 181, 2550-2570.	4.0	30
44	A call to arms. SIGMOD Record, 2011, 40, 61-69.	0.7	40
45	Recursive n-gram hashing is pairwise independent, at best. Computer Speech and Language, 2010, 24, 698-710.	2.9	20
46	Sorting improves word-aligned bitmap indexes. Data and Knowledge Engineering, 2010, 69, 3-28.	2.1	73
47	Introduction to the Special Issue on Learning and the Social Web. Journal of Emerging Technologies in Web Intelligence, 2010, 2, .	0.6	2
48	An optimal linear time algorithm for quasi-monotonic segmentation1. International Journal of Computer Mathematics, 2009, 86, 1093-1104.	1.0	3
49	Faster retrieval with a two-pass dynamic-time-warping lower bound. Pattern Recognition, 2009, 42, 2169-2180.	5.1	138
50	Web 2.0 OLAP: From Data Cubes to Tag Clouds. Lecture Notes in Business Information Processing, 2009, , 51-64.	0.8	7
51	Histogram-aware sorting for enhanced word-aligned compression in bitmap indexes. , 2008, , .		9
52	Hierarchical bin buffering. ACM Transactions on Algorithms, 2008, 4, 1-31.	0.9	0
53	Pruning attribute values from data cubes with diamond dicing. , 2008, , .		1
54	A Better Alternative to Piecewise Linear Time Series Segmentation. , 2007, , .		51

#	ARTICLE	IF	CITATIONS
55	A comparison of five probabilistic view-size estimation techniques in OLAP. , 2007, , .		16
56	INTRODUCTION TO THE SPECIAL ISSUE ON CANADIAN SEMANTIC WEB. Computational Intelligence, 2007, 23, 299-301.	2.1	0
57	Attribute value reordering for efficient hybrid OLAP. Information Sciences, 2006, 176, 2304-2336.	4.0	5
58	Slope One Predictors for Online Rating-Based Collaborative Filtering. , 2005, , .		366
59	Scale and Translation Invariant Collaborative Filtering Systems. Information Retrieval, 2005, 8, 129-150.	1.6	36
60	Collaborative filtering and inference rules for context-aware learning object recommendation. Interactive Technology and Smart Education, 2005, 2, 179-188.	3.8	42
61	Attribute value reordering for efficient hybrid OLAP. , 2003, , .		4
62	Fourier analysis of 2-point hermite interpolatory subdivision schemes. Journal of Fourier Analysis and Applications, 2001, 7, 537-552.	0.5	2
63	Wavelet time entropy, T wave morphology and myocardial ischemia. IEEE Transactions on Biomedical Engineering, 2000, 47, 967-970.	2.5	62
64	Transcoding billions of Unicode characters per second with SIMD instructions. Software - Practice and Experience, 0, , .	2.5	3