

# 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

331670

21  
h-index

330143

37  
g-index

65  
all docs

65  
docs citations

65  
times ranked

1479  
citing authors

#	ARTICLE	IF	CITATIONS
1	Slope One Predictors for Online Rating-Based Collaborative Filtering. , 2005, , .		366
2	Decoding billions of integers per second through vectorization. Software - Practice and Experience, 2015, 45, 1-29.	3.6	178
3	Measuring academic influence: Not all citations are equal. Journal of the Association for Information Science and Technology, 2015, 66, 408-427.	2.9	159
4	Faster retrieval with a two-pass dynamic-time-warping lower bound. Pattern Recognition, 2009, 42, 2169-2180.	8.1	138
5	Better bitmap performance with Roaring bitmaps. Software - Practice and Experience, 2016, 46, 709-719.	3.6	96
6	Sorting improves word-aligned bitmap indexes. Data and Knowledge Engineering, 2010, 69, 3-28.	3.4	73
7	Apache Calcite. , 2018, , .		73
8	Wavelet time entropy, T wave morphology and myocardial ischemia. IEEE Transactions on Biomedical Engineering, 2000, 47, 967-970.	4.2	62
9	SIMD compression and the intersection of sorted integers. Software - Practice and Experience, 2016, 46, 723-749.	3.6	59
10	A Better Alternative to Piecewise Linear Time Series Segmentation. , 2007, , .		51
11	Xor Filters. Journal of Experimental Algorithmics, 2020, 25, 1-16.	1.0	45
12	Collaborative filtering and inference rules for context-aware learning object recommendation. Interactive Technology and Smart Education, 2005, 2, 179-188.	5.6	42
13	A call to arms. SIGMOD Record, 2011, 40, 61-69.	1.2	40
14	Scale and Translation Invariant Collaborative Filtering Systems. Information Retrieval, 2005, 8, 129-150.	2.0	36
15	Bloofi: Multidimensional Bloom filters. Information Systems, 2015, 54, 311-324.	3.6	34
16	Parsing gigabytes of JSON per second. VLDB Journal, 2019, 28, 941-960.	4.1	32
17	Roaring bitmaps: Implementation of an optimized software library. Software - Practice and Experience, 2018, 48, 867-895.	3.6	31
18	Reordering columns for smaller indexes. Information Sciences, 2011, 181, 2550-2570.	6.9	30

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19	Consistently faster and smaller compressed bitmaps with Roaring. <i>Software - Practice and Experience</i> , 2016, 46, 1547-1569.	3.6	30
20	Faster Population Counts Using AVX2 Instructions. <i>Computer Journal</i> , 2018, 61, 111-120.	2.4	29
21	Stream VByte : Faster byte-oriented integer compression. <i>Information Processing Letters</i> , 2018, 130, 1-6.	0.6	28
22	A General SIMD-Based Approach to Accelerating Compression Algorithms. <i>ACM Transactions on Information Systems</i> , 2015, 33, 1-28.	4.9	26
23	Time series classification by class-specific Mahalanobis distance measures. <i>Advances in Data Analysis and Classification</i> , 2012, 6, 185-200.	1.4	23
24	Fast Random Integer Generation in an Interval. <i>ACM Transactions on Modeling and Computer Simulation</i> , 2019, 29, 1-12.	0.8	22
25	Recursive n-gram hashing is pairwise independent, at best. <i>Computer Speech and Language</i> , 2010, 24, 698-710.	4.3	20
26	Reordering rows for better compression. <i>ACM Transactions on Database Systems</i> , 2012, 37, 1-29.	2.8	20
27	A comparison of five probabilistic view-size estimation techniques in OLAP. , 2007, , .		16
28	New method for denoising borehole transient electromagnetic data with discrete wavelet transform. <i>Journal of Applied Geophysics</i> , 2019, 168, 41-48.	2.1	16
29	Faster 64-bit universal hashing using carry-less multiplications. <i>Journal of Cryptographic Engineering</i> , 2016, 6, 171-185.	1.8	15
30	Faster remainder by direct computation: Applications to compilers and software libraries. <i>Software - Practice and Experience</i> , 2019, 49, 953-970.	3.6	13
31	Strongly Universal String Hashing is Fast. <i>Computer Journal</i> , 2014, 57, 1624-1638.	2.4	12
32	Optimizing Druid with Roaring bitmaps. , 2016, , .		12
33	Faster Base64 Encoding and Decoding Using AVX2 Instructions. <i>ACM Transactions on the Web</i> , 2018, 12, 1-26.	2.5	12
34	Scaling Up Web Service Composition with the Skyline Operator. , 2016, , .		11
35	Full Solution Indexing for Top-K Web Service Composition. <i>IEEE Transactions on Services Computing</i> , 2018, 11, 521-533.	4.6	10
36	Histogram-aware sorting for enhanced word-aligned compression in bitmap indexes. , 2008, , .		9

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37	Full Solution Indexing Using Database for QoS-Aware Web Service Composition. , 2014, , .		9
38	Compressed bitmap indexes: beyond unions and intersections. Software - Practice and Experience, 2016, 46, 167-198.	3.6	9
39	Changing computational research. The challenges ahead. Source Code for Biology and Medicine, 2012, 7, 2.	1.7	8
40	Xorshift1024*, xorshift1024+, xorshift128+ and xoroshiro128+ fail statistical tests for linearity. Journal of Computational and Applied Mathematics, 2019, 350, 139-142.	2.0	8
41	Web 2.0 OLAP: From Data Cubes to Tag Clouds. Lecture Notes in Business Information Processing, 2009, , 51-64.	1.0	7
42	The universality of iterated hashing over variable-length strings. Discrete Applied Mathematics, 2012, 160, 604-617.	0.9	6
43	Upscaledb: Efficient integer-key compression in a key-value store using SIMD instructions. Information Systems, 2017, 66, 13-23.	3.6	6
44	Attribute value reordering for efficient hybrid OLAP. Information Sciences, 2006, 176, 2304-2336.	6.9	5
45	Functional Dependencies with null Markers. Computer Journal, 2015, 58, 1160-1168.	2.4	5
46	Validating UTF-8 in less than one instruction per byte. Software - Practice and Experience, 2021, 51, 950-964.	3.6	5
47	Number parsing at a gigabyte per second. Software - Practice and Experience, 2021, 51, 1700-1727.	3.6	5
48	A Web Service Composition Method Based on Compact K2-Trees. , 2015, , .		4
49	Base64 encoding and decoding at almost the speed of a memory copy. Software - Practice and Experience, 2020, 50, 89-97.	3.6	4
50	Attribute value reordering for efficient hybrid OLAP. , 2003, , .		4
51	An optimal linear time algorithm for quasi-monotonic segmentation1. International Journal of Computer Mathematics, 2009, 86, 1093-1104.	1.8	3
52	Regular and almost universal hashing: an efficient implementation. Software - Practice and Experience, 2017, 47, 1299-1323.	3.6	3
53	Transcoding billions of Unicode characters per second with SIMD instructions. Software - Practice and Experience, 0, , .	3.6	3
54	Binary Fuse Filters: Fast and Smaller Than Xor Filters. Journal of Experimental Algorithmics, 2022, 27, 1-15.	1.0	3

#	ARTICLE	IF	CITATIONS
55	Fourier analysis of 2-point hermite interpolatory subdivision schemes. Journal of Fourier Analysis and Applications, 2001, 7, 537-552.	1.0	2
56	Diamond dicing. Data and Knowledge Engineering, 2013, 86, 1-18.	3.4	2
57	Integer division by constants: optimal bounds. Heliyon, 2021, 7, e07442.	3.2	2
58	An Analysis Tool for the Contextual Information from Field Experiments on Driving Fatigue. Lecture Notes in Computer Science, 2015, , 172-185.	1.3	2
59	Introduction to the Special Issue on Learning and the Social Web. Journal of Emerging Technologies in Web Intelligence, 2010, 2, .	0.6	2
60	Pruning attribute values from data cubes with diamond dicing. , 2008, , .		1
61	INTRODUCTION TO THE SPECIAL ISSUE ON CANADIAN SEMANTIC WEB. Computational Intelligence, 2007, 23, 299-301.	3.2	0
62	Hierarchical bin buffering. ACM Transactions on Algorithms, 2008, 4, 1-31.	1.0	0
63	On Desirable Semantics of Functional Dependencies over Databases with Incomplete Information. Fundamenta Informaticae, 2018, 158, 327-352.	0.4	0
64	Efficient computation of positional population counts using SIMD instructions. Concurrency Computation Practice and Experience, 2021, 33, e6304.	2.2	0