Eamonn Keogh

List of Publications by Year in Descending Order

165 papers	14,407 citations	57 h-index	119 g-index
174 ext. papers	17,892 ext. citations	3.3 avg, IF	6.83 L-index

#	Paper	IF	Citations
165	Introducing the contrast profile: a novel time series primitive that allows real world classification. *Data Mining and Knowledge Discovery*, **2022**, 36, 877-915	5.6	
164	Qute: Query by Text Search for Time Series Data. *Advances in Intelligent Systems and Computing*, **2021**, 412-427	0.4	
163	Matrix Profile IX: Admissible Time Series Motif Discovery With Missing Data. *IEEE Transactions on Knowledge and Data Engineering*, **2021**, 33, 2616-2626	4.2	3
162	Time series motifs discovery under DTW allows more robust discovery of conserved structure. *Data Mining and Knowledge Discovery*, **2021**, 35, 863-910	5.6	3
161	Matrix profile goes MAD: variable-length motif and discord discovery in data series. *Data Mining and Knowledge Discovery*, **2020**, 34, 1022-1071	5.6	19
160	An ultra-fast time series distance measure to allow data mining in more complex real-world deployments. *Data Mining and Knowledge Discovery*, **2020**, 34, 1104-1135	5.6	4
159	The Swiss army knife of time series data mining: ten useful things you can do with the matrix profile and ten lines of code. *Data Mining and Knowledge Discovery*, **2020**, 34, 949-979	5.6	6
158	Features or Shape? Tackling the False Dichotomy of Time Series Classification **2020**, 442-450		5
157	Introducing time series snippets: a new primitive for summarizing long time series. *Data Mining and Knowledge Discovery*, **2020**, 34, 1713-1743	5.6	2
156	Matrix Profile XXII: Exact Discovery of Time Series Motifs Under DTW **2020**,		3
155	MERLIN: Parameter-Free Discovery of Arbitrary Length Anomalies in Massive Time Series Archives **2020**,		6
154	Natura: Towards Conversational Analytics for Comparing and Contrasting Time Series **2020**,		2
153	Fitbit for Chickens? **2020**,		3
152	Putting the Human in the Time Series Analytics Loop **2019**,		5
151	Super-Efficient Cross-Correlation (SEC-C): A Fast Matched Filtering Code Suitable for Desktop Computers. *Seismological Research Letters*, **2019**, 90, 322-334	3	15
150	Introducing time series chains: a new primitive for time series data mining. *Knowledge and Information Systems*, **2019**, 60, 1135-1161	2.4	9
149	Online Amnestic DTW to allow Real-Time Golden Batch Monitoring **2019**,		3

148	Matrix Profile XVI: Efficient and Effective Labeling of Massive Time Series Archives **2019**,		3
147	Matrix Profile XVIII: Time Series Mining in the Face of Fast Moving Streams using a Learned Approximate Matrix Profile **2019**,		1
146	Matrix Profile XV: Exploiting Time Series Consensus Motifs to Find Structure in Time Series Sets **2019**,		4
145	Matrix Profile XIX: Time Series Semantic Motifs: A New Primitive for Finding Higher-Level Structure in Time Series **2019**,		3
144	The UCR time series archive. *IEEE/CAA Journal of Automatica Sinica*, **2019**, 6, 1293-1305	7	155
143	Matrix Profile XIV **2019**,		12
142	Domain agnostic online semantic segmentation for multi-dimensional time series. *Data Mining and Knowledge Discovery*, **2019**, 33, 96-130	5.6	14
141	Optimizing dynamic time warping's window width for time series data mining applications. *Data Mining and Knowledge Discovery*, **2018**, 32, 1074-1120	5.6	30
140	Exploiting a novel algorithm and GPUs to break the ten quadrillion pairwise comparisons barrier for time series motifs and joins. *Knowledge and Information Systems*, **2018**, 54, 203-236	2.4	15
139	Speeding up similarity search under dynamic time warping by pruning unpromising alignments. *Data Mining and Knowledge Discovery*, **2018**, 32, 988-1016	5.6	35
138	Time series joins, motifs, discords and shapelets: a unifying view that exploits the matrix profile. *Data Mining and Knowledge Discovery*, **2018**, 32, 83-123	5.6	49
137	Accelerating Time Series Searching with Large Uniform Scaling **2018**, 234-242		4
136	VALMOD **2018**,		12
135	Matrix Profile XIII: Time Series Snippets: A New Primitive for Time Series Data Mining **2018**,		12
134	Matrix Profile XI: SCRIMP++: Time Series Motif Discovery at Interactive Speeds **2018**,		26
133	Matrix Profile XII: MPdist: A Novel Time Series Distance Measure to Allow Data Mining in More Challenging Scenarios **2018**,		9
132	Matrix Profile X **2018**,		36
131	Reliable early classification of time series based on discriminating the classes over time. *Data Mining and Knowledge Discovery*, **2017**, 31, 233-263	5.6	38

130	Generalizing DTW to the multi-dimensional case requires an adaptive approach. *Data Mining and Knowledge Discovery*, **2017**, 31, 1-31	5.6	83
129	Searching Time Series with Invariance to Large Amounts of Uniform Scaling **2017**,		2
128	Matrix Profile V **2017**,		17
127	The great time series classification bake off: a review and experimental evaluation of recent algorithmic advances. *Data Mining and Knowledge Discovery*, **2017**, 31, 606-660	5.6	468
126	Matrix Profile VII: Time Series Chains: A New Primitive for Time Series Data Mining (Best Student Paper Award) **2017**,		11
125	Matrix Profile VIII: Domain Agnostic Online Semantic Segmentation at Superhuman Performance Levels **2017**,		18
124	Matrix profile IV. *Proceedings of the VLDB Endowment*, **2017**, 10, 1802-1812	3.1	12
123	**2017**,		8
122	Generating Synthetic Time Series to Augment Sparse Datasets **2017**,		37
121	Semi-Supervision Dramatically Improves Time Series Clustering under Dynamic Time Warping **2016**,		19
120	Classification of streaming time series under more realistic assumptions. *Data Mining and Knowledge Discovery*, **2016**, 30, 403-437	5.6	14
119	Accelerating the discovery of unsupervised-shapelets. *Data Mining and Knowledge Discovery*, **2016**, 30, 243-281	5.6	13
118	Faster and more accurate classification of time series by exploiting a novel dynamic time warping averaging algorithm. *Knowledge and Information Systems*, **2016**, 47, 1-26	2.4	69
117	Matrix Profile I: All Pairs Similarity Joins for Time Series: A Unifying View That Includes Motifs, Discords and Shapelets **2016**,		156
116	Matrix Profile III: The Matrix Profile Allows Visualization of Salient Subsequences in Massive Time Series **2016**,		11
115	Matrix Profile II: Exploiting a Novel Algorithm and GPUs to Break the One Hundred Million Barrier for Time Series Motifs and Joins **2016**,		73
114	Prefix and Suffix Invariant Dynamic Time Warping **2016**,		10
113	Irrevocable-choice algorithms for sampling from a stream. *Data Mining and Knowledge Discovery*, **2016**, 30, 998-1023	5.6	1

112	A general framework for never-ending learning from time series streams. *Data Mining and Knowledge Discovery*, **2015**, 29, 1622-1664	5.6	16
111	Discovery of Meaningful Rules in Time Series **2015**,		41
110	Accelerating Dynamic Time Warping Clustering with a Novel Admissible Pruning Strategy **2015**,		37
109	Establishing the provenance of historical manuscripts with a novel distance measure. *Pattern Analysis and Applications*, **2015**, 18, 313-331	2.3	6
108	Using the minimum description length to discover the intrinsic cardinality and dimensionality of time series. *Data Mining and Knowledge Discovery*, **2015**, 29, 358-399	5.6	11
107	On the Non-Trivial Generalization of Dynamic Time Warping to the Multi-Dimensional Case **2015**,		35
106	Scalable Clustering of Time Series with U-Shapelets **2015**,		19
105	Flying Insect Classification with Inexpensive Sensors. *Journal of Insect Behavior*, **2014**, 27, 657-677	1.1	69
104	Beyond one billion time series: indexing and mining very large time series collections with (i)SAX2+. *Knowledge and Information Systems*, **2014**, 39, 123-151	2.4	63
103	Flying insect detection and classification with inexpensive sensors. *Journal of Visualized Experiments*, **2014**, e52111	1.6	18
102	Rare time series motif discovery from unbounded streams. *Proceedings of the VLDB Endowment*, **2014**, 8, 149-160	3.1	28
101	Dynamic Time Warping Averaging of Time Series Allows Faster and More Accurate Classification **2014**,		95
100	A Minimum Description Length Technique for Semi-Supervised Time Series Classification. *Advances in Intelligent Systems and Computing*, **2014**, 171-192	0.4	9
99	Monitoring and Mining Animal Sounds in Visual Space. *Journal of Insect Behavior*, **2013**, 26, 466-493	1.1	9
98	DTW-D **2013**,		47
97	Towards never-ending learning from time series streams **2013**,		13
96	Addressing Big Data Time Series. *ACM Transactions on Knowledge Discovery From Data*, **2013**, 7, 1-31	4	43
95	Classification of Multi-dimensional Streaming Time Series by Weighting Each Classifier's Track Record **2013**,		17

94	Parameter-Free Audio Motif Discovery in Large Data Archives **2013**,		5
93	Towards a minimum description length based stopping criterion for semi-supervised time series classification **2013**,		14
92	Experimental comparison of representation methods and distance measures for time series data. *Data Mining and Knowledge Discovery*, **2013**, 26, 275-309	5.6	458
91	Fast Shapelets: A Scalable Algorithm for Discovering Time Series Shapelets **2013**,		149
90	Time Series Classification under More Realistic Assumptions **2013**,		57
89	Instruction set extensions for Dynamic Time Warping **2013**,		3
88	Addressing Big Data Time Series. *ACM Transactions on Knowledge Discovery From Data*, **2013**, 7, 1-31	4	57
87	Towards Discovering the Intrinsic Cardinality and Dimensionality of Time Series Using MDL. *Lecture Notes in Computer Science*, **2013**, 184-197	0.9	1
86	Mining historical manuscripts with local color patches. *Knowledge and Information Systems*, **2012**, 30, 637-665	2.4	1
85	Searching and Mining Trillions of Time Series Subsequences under Dynamic Time Warping. *KDD: Proceedings*, **2012**, 2012, 262-270	6.8	439
84	Clustering Time Series Using Unsupervised-Shapelets **2012**,		78
83	Mining Massive Archives of Mice Sounds with Symbolized Representations **2012**,		4
82	Image Mining of Historical Manuscripts to Establish Provenance **2012**,		6
81	A disk-aware algorithm for time series motif discovery. *Data Mining and Knowledge Discovery*, **2011**, 22, 73-105	5.6	18
80	Time series shapelets: a novel technique that allows accurate, interpretable and fast classification. *Data Mining and Knowledge Discovery*, **2011**, 22, 149-182	5.6	164
79	An efficient and effective similarity measure to enable data mining of petroglyphs. *Data Mining and Knowledge Discovery*, **2011**, 23, 91-127	5.6	25
78	Logical-shapelets **2011**,		141
77	Discovering the Intrinsic Cardinality and Dimensionality of Time Series Using MDL **2011**,		28

76	Polishing the Right Apple: Anytime Classification Also Benefits Data Streams with Constant Arrival Times **2010**,		5
75	iSAX 2.0: Indexing and Mining One Billion Time Series **2010**,		96
74	Online discovery and maintenance of time series motifs **2010**,		60
73	Classification of Live Moths Combining Texture, Color and Shape Primitives **2010**,		7
72	A brief survey on sequence classification. *SIGKDD Explorations: Newsletter of the Special Interest Group (SIG) on Knowledge Discovery & Data Mining*, **2010**, 12, 40-48	4.6	306
71	Mother Fugger: Mining Historical Manuscripts with Local Color Patches **2010**,		8
70	Accelerating Dynamic Time Warping Subsequence Search with GPUs and FPGAs **2010**,		68
69	Data Editing Techniques to Allow the Application of Distance-Based Outlier Detection to Streams **2010**,		13
68	Using CAPTCHAs to Index Cultural Artifacts. *Lecture Notes in Computer Science*, **2010**, 245-257	0.9	3
67	Autocannibalistic and Anyspace Indexing Algorithms with Applications to Sensor Data Mining **2009**,		3
66	Exact Discovery of Time Series Motifs **2009**, 2009, 473-484	0.8	215
65	Augmenting the generalized hough transform to enable the mining of petroglyphs **2009**,		15
64	Mining Time Series Data **2009**, 1049-1077		25
63	Supporting exact indexing of arbitrarily rotated shapes and periodic time series under Euclidean and warping distance measures. *VLDB Journal*, **2009**, 18, 611-630	3.9	78
62	iSAX: disk-aware mining and indexing of massive time series datasets. *Data Mining and Knowledge Discovery*, **2009**, 19, 24-57	5.6	45
61	Finding Time Series Motifs in Disk-Resident Data **2009**,		22
60	Time series shapelets **2009**,		392
59	Compression-Based Data Mining **2009**, 278-285		3

58	Making Image Retrieval and Classification More Accurate Using Time Series and Learned Constraints **2009**, 145-170		13
57	Real-Time Classification of Streaming Sensor Data **2008**,		16
56	. *IEEE Transactions on Multimedia*, **2008**, 10, 230-239	6.6	8
55	Querying and mining of time series data. *Proceedings of the VLDB Endowment*, **2008**, 1, 1542-1552	3.1	700
54	Streaming Time Series Summarization Using User-Defined Amnesic Functions. *IEEE Transactions on Knowledge and Data Engineering*, **2008**, 20, 992-1006	4.2	42
53	iSAX **2008**,		174
52	Efficiently finding unusual shapes in large image databases. *Data Mining and Knowledge Discovery*, **2008**, 17, 343-376	5.6	11
51	Scaling and time warping in time series querying. *VLDB Journal*, **2008**, 17, 899-921	3.9	100
50	Converting non-parametric distance-based classification to anytime algorithms. *Pattern Analysis and Applications*, **2008**, 11, 321-336	2.3	7
49	Disk aware discord discovery: finding unusual time series in terabyte sized datasets. *Knowledge and Information Systems*, **2008**, 17, 241-262	2.4	59
48	Compression-based data mining of sequential data. *Data Mining and Knowledge Discovery*, **2007**, 14, 99-129	3.0	63
47	Experiencing SAX: a novel symbolic representation of time series. *Data Mining and Knowledge Discovery*, **2007**, 15, 107-144	5.6	870
46	Efficient query filtering for streaming time series with applications to semisupervised learning of time series classifiers. *Knowledge and Information Systems*, **2007**, 11, 313-344	2.4	6
45	Detecting time series motifs under uniform scaling **2007**,		71
44	Locally Constrained Support Vector Clustering **2007**,		8
43	WAT: Finding Top-K Discords in Time Series Database **2007**,		43
42	Disk Aware Discord Discovery: Finding Unusual Time Series in Terabyte Sized Datasets **2007**,		28
41	Finding unusual medical time-series subsequences: algorithms and applications. *IEEE Transactions on Information Technology in Biomedicine*, **2006**, 10, 429-39		43

40	Semi-supervised time series classification **2006**,		128
39	Anytime Classification Using the Nearest Neighbor Algorithm with Applications to Stream Mining. *IEEE International Conference on Data Mining*, **2006**,		48
38	. *IEEE International Conference on Data Mining*, **2006**,		17
37	Clustering Workflow Requirements Using Compression Dissimilarity Measure **2006**,		3
36	SAXually Explicit Images: Finding Unusual Shapes. *IEEE International Conference on Data Mining*, **2006**,		41
35	Fast time series classification using numerosity reduction **2006**,		255
34	A Bit Level Representation for Time Series Data Mining with Shape Based Similarity. *Data Mining and Knowledge Discovery*, **2006**, 13, 11-40	5.6	47
33	Indexing Multidimensional Time-Series. *VLDB Journal*, **2006**, 15, 1-20	3.9	88
32	Finding the most unusual time series subsequence: algorithms and applications. *Knowledge and Information Systems*, **2006**, 11, 1-27	2.4	92
31	Efficient Discovery of Unusual Patterns in Time Series. *New Generation Computing*, **2006**, 25, 61-93	0.9	8
30	Finding Time Series Discords Based on Haar Transform. *Lecture Notes in Computer Science*, **2006**, 31-41	0.9	29
29	Group SAX: Extending the Notion of Contrast Sets to Time Series and Multimedia Data. *Lecture Notes in Computer Science*, **2006**, 284-296	0.9	10
28	Time-series Bitmaps: a Practical Visualization Tool for Working with Large Time Series Databases **2005**,		71
27	Mining Time Series Data **2005**, 1069-1103		27
26	A MPAA-Based Iterative Clustering Algorithm Augmented by Nearest Neighbors Search for Time-Series Data Streams. *Lecture Notes in Computer Science*, **2005**, 333-342	0.9	9
25	Exact indexing of dynamic time warping. *Knowledge and Information Systems*, **2005**, 7, 358-386	2.4	956
24	Clustering of time-series subsequences is meaningless: implications for previous and future research. *Knowledge and Information Systems*, **2005**, 8, 154-177	2.4	207
23	Visualizing and Discovering Non-Trivial Patterns in Large Time Series Databases. *Information Visualization*, **2005**, 4, 61-82	2.4	71

22	Three Myths about Dynamic Time Warping Data Mining **2005**,		167
21	A Novel Bit Level Time Series Representation with Implication of Similarity Search and Clustering. *Lecture Notes in Computer Science*, **2005**, 771-777	0.9	46
20	Making Time-series Classification More Accurate Using Learned Constraints **2004**,		170
19	SEGMENTING TIME SERIES: A SURVEY AND NOVEL APPROACH. *Series in Machine Perception and Artificial Intelligence*, **2004**, 1-21	0.3	240
18	Visually mining and monitoring massive time series **2004**,		75
17	Towards parameter-free data mining **2004**,		275
16	Indexing Large Human-Motion Databases **2004**, 780-791		84
15	Probabilistic discovery of time series motifs **2003**,		278
14	Clustering of streaming time series is meaningless **2003**,		14
13	Efficiently Finding Arbitrarily Scaled Patterns in Massive Time Series Databases. *Lecture Notes in Computer Science*, **2003**, 253-265	0.9	11
12	On the Need for Time Series Data Mining Benchmarks: A Survey and Empirical Demonstration. *Data Mining and Knowledge Discovery*, **2003**, 7, 349-371	5.6	459
11	Indexing multi-dimensional time-series with support for multiple distance measures **2003**,		197
10	A symbolic representation of time series, with implications for streaming algorithms **2003**,		552
9	Exact Indexing of Dynamic Time Warping **2002**, 406-417		342
8	Locally adaptive dimensionality reduction for indexing large time series databases. *ACM Transactions on Database Systems*, **2002**, 27, 188-228	1.6	228
7	Iterative Deepening Dynamic Time Warping for Time Series **2002**,		96
6	Finding surprising patterns in a time series database in linear time and space **2002**,		179
5	On the need for time series data mining benchmarks **2002**,		195

4	Dimensionality Reduction for Fast Similarity Search in Large Time Series Databases. *Knowledge and Information Systems*, **2001**, 3, 263-286	2.4	755
3	Locally adaptive dimensionality reduction for indexing large time series databases **2001**,		261
2	Locally adaptive dimensionality reduction for indexing large time series databases. *SIGMOD Record*, **2001**, 30, 151-162	1.1	204
1	FINDING OR NOT FINDING RULES IN TIME SERIES. *Advances in Econometrics*,175-201	0.3	2