

S Muthukrishnan

List of Publications by Year in descending order

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Version: 2024-02-01

77
papers

5,483
citations

279701

23
h-index

197736

49
g-index

80
all docs

80
docs citations

80
times ranked

2704
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | An improved data stream summary: the count-min sketch and its applications. Journal of Algorithms, 2005, 55, 58-75. | 0.9 | 1,326 |
| 2 | Data Streams: Algorithms and Applications. Foundations and Trends in Theoretical Computer Science, 2005, 1, 117-236. | 2.0 | 568 |
| 3 | Node Classification in Social Networks. , 2011, , 115-148. | | 313 |
| 4 | What's hot and what's not: tracking most frequent items dynamically. ACM Transactions on Database Systems, 2005, 30, 249-278. | 1.5 | 269 |
| 5 | Heavy-Hitter Detection Entirely in the Data Plane. , 2017, , . | | 266 |
| 6 | Scheduling on-demand broadcasts. , 1998, , . | | 184 |
| 7 | Near-optimal sparse fourier representations via sampling. , 2002, , . | | 156 |
| 8 | Fast, small-space algorithms for approximate histogram maintenance. , 2002, , . | | 138 |
| 9 | What's new: finding significant differences in network data streams. IEEE/ACM Transactions on Networking, 2005, 13, 1219-1232. | 2.6 | 123 |
| 10 | Ad Exchanges: Research Issues. Lecture Notes in Computer Science, 2009, , 1-12. | 1.0 | 122 |
| 11 | Finding Hierarchical Heavy Hitters in Data Streams. , 2003, , 464-475. | | 121 |
| 12 | First- and Second-Order Diffusive Methods for Rapid, Coarse, Distributed Load Balancing. Theory of Computing Systems, 1998, 31, 331-354. | 0.7 | 114 |
| 13 | Compressing and indexing labeled trees, with applications. Journal of the ACM, 2009, 57, 1-33. | 1.8 | 113 |
| 14 | An Improved Data Stream Summary: The Count-Min Sketch and Its Applications. Lecture Notes in Computer Science, 2004, , 29-38. | 1.0 | 107 |
| 15 | Online Ad Assignment with Free Disposal. Lecture Notes in Computer Science, 2009, , 374-385. | 1.0 | 106 |
| 16 | Budget optimization in search-based advertising auctions. , 2007, , . | | 103 |
| 17 | One-pass wavelet decompositions of data streams. IEEE Transactions on Knowledge and Data Engineering, 2003, 15, 541-554. | 4.0 | 97 |
| 18 | Yield Optimization of Display Advertising with Ad Exchange. Management Science, 2014, 60, 2886-2907. | 2.4 | 96 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 19 | How to Summarize the Universe. , 2002, , 454-465. | | 81 |
| 20 | Comparing data streams using hamming norms (how to zero in). IEEE Transactions on Knowledge and Data Engineering, 2003, 15, 529-540. | 4.0 | 68 |
| 21 | On Rectangular Partitionings in Two Dimensions: Algorithms, Complexity and Applications. Lecture Notes in Computer Science, 1999, , 236-256. | 1.0 | 67 |
| 22 | Finding hierarchical heavy hitters in streaming data. ACM Transactions on Knowledge Discovery From Data, 2008, 1, 1-48. | 2.5 | 62 |
| 23 | Tight Analyses of Two Local Load Balancing Algorithms. SIAM Journal on Computing, 1999, 29, 29-64. | 0.8 | 45 |
| 24 | Efficient Approximation Algorithms for Tiling and Packing Problems with Rectangles. Journal of Algorithms, 2001, 41, 443-470. | 0.9 | 42 |
| 25 | Optimal and approximate computation of summary statistics for range aggregates. , 2001, , . | | 42 |
| 26 | Selectively estimation for Boolean queries. , 2000, , . | | 41 |
| 27 | What’s Different: Distributed, Continuous Monitoring of Duplicate-Resilient Aggregates on Data Streams. , 2006, , . | | 41 |
| 28 | Optimal logarithmic time randomized suffix tree construction. Lecture Notes in Computer Science, 1996, , 550-561. | 1.0 | 39 |
| 29 | 40 years of suffix trees. Communications of the ACM, 2016, 59, 66-73. | 3.3 | 37 |
| 30 | Comparing Data Streams Using Hamming Norms (How to Zero In). , 2002, , 335-345. | | 36 |
| 31 | Optimal parallel dictionary matching and compression (extended abstract). , 1995, , . | | 35 |
| 32 | Stochastic Models for Budget Optimization in Search-Based Advertising. Algorithmica, 2010, 58, 1022-1044. | 1.0 | 32 |
| 33 | Optimally fast parallel algorithms for preprocessing and pattern matching in one and two dimensions. , 0, , . | | 30 |
| 34 | Sequential Change Detection on Data Streams. , 2007, , . | | 30 |
| 35 | Bidding to the Top: VCG and Equilibria of Position-Based Auctions. Lecture Notes in Computer Science, 2007, , 15-28. | 1.0 | 30 |
| 36 | Augmenting Suffix Trees, with Applications. Lecture Notes in Computer Science, 1998, , 67-78. | 1.0 | 30 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 37 | Approximation Algorithms for Average Stretch Scheduling. <i>Journal of Scheduling</i> , 2004, 7, 195-222. | 1.3 | 26 |
| 38 | A Truthful Mechanism for Offline Ad Slot Scheduling. <i>Lecture Notes in Computer Science</i> , 2008, , 182-193. | 1.0 | 23 |
| 39 | Internet Ad Auctions: Insights and Directions. <i>Lecture Notes in Computer Science</i> , 2008, , 14-23. | 1.0 | 22 |
| 40 | Exact Size of Binary Space Partitionings and Improved Rectangle Tiling Algorithms. <i>SIAM Journal on Discrete Mathematics</i> , 2002, 15, 252-267. | 0.4 | 19 |
| 41 | Position Auctions with Bidder-Specific Minimum Prices. <i>Lecture Notes in Computer Science</i> , 2008, , 577-584. | 1.0 | 19 |
| 42 | SocialCDN: Caching techniques for distributed social networks. , 2012, , . | | 18 |
| 43 | Two-dimensional substring indexing. <i>Journal of Computer and System Sciences</i> , 2003, 66, 763-774. | 0.9 | 17 |
| 44 | Fast mining of massive tabular data via approximate distance computations. , 0, , . | | 16 |
| 45 | Social Butterfly: Social Caches for Distributed Social Networks. , 2011, , . | | 15 |
| 46 | Highly efficient dictionary matching in parallel. , 1993, , . | | 14 |
| 47 | A Constant Time Optimal Parallel Algorithm for Two-Dimensional Pattern Matching. <i>SIAM Journal on Computing</i> , 1998, 27, 668-681. | 0.8 | 13 |
| 48 | App2Vec: Vector modeling of mobile apps and applications. , 2016, , . | | 11 |
| 49 | Constructions and Applications for Accurate Counting of the Bloom Filter False Positive Free Zone. , 2020, , . | | 11 |
| 50 | Stochastic Budget Optimization in Internet Advertising. <i>Algorithmica</i> , 2013, 65, 634-661. | 1.0 | 10 |
| 51 | Socializing the h-index. <i>Journal of Informetrics</i> , 2013, 7, 718-721. | 1.4 | 9 |
| 52 | Domain-driven data synopses for dynamic quantiles. <i>IEEE Transactions on Knowledge and Data Engineering</i> , 2005, 17, 927-938. | 4.0 | 8 |
| 53 | Generalized substring selectivity estimation. <i>Journal of Computer and System Sciences</i> , 2003, 66, 98-132. | 0.9 | 7 |
| 54 | Approximation algorithms for MAX-MIN tiling. <i>Journal of Algorithms</i> , 2003, 47, 122-134. | 0.9 | 7 |

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|----|--|-----|-----------|
| 55 | Estimating Entropy and Entropy Norm on Data Streams. Internet Mathematics, 2006, 3, 63-78. | 0.7 | 7 |
| 56 | On Signatures for Communication Graphs. , 2008, , . | | 7 |
| 57 | Avoiding Flow Size Overestimation in Count-Min Sketch With Bloom Filter Constructions. IEEE Transactions on Network and Service Management, 2021, 18, 3662-3676. | 3.2 | 7 |
| 58 | Theory research at Google. ACM SIGACT News, 2008, 39, 10-28. | 0.1 | 6 |
| 59 | Second-Order Methods for Distributed Approximate Single- and Multicommodity Flow. Lecture Notes in Computer Science, 1998, , 369-384. | 1.0 | 5 |
| 60 | AN ADVERSARIAL MODEL FOR DISTRIBUTED DYNAMIC LOAD BALANCING. Journal of Interconnection Networks, 2002, 03, 35-47. | 0.6 | 5 |
| 61 | Targeting algorithms for online social advertising markets. , 2016, , . | | 4 |
| 62 | Scienceography: The Study of How Science Is Written. Lecture Notes in Computer Science, 2012, , 379-391. | 1.0 | 3 |
| 63 | Simple Optimal Parallel Multiple Pattern Matching. Journal of Algorithms, 2000, 34, 1-13. | 0.9 | 2 |
| 64 | Graphical Model Sketch. Lecture Notes in Computer Science, 2016, , 81-97. | 1.0 | 2 |
| 65 | Streaming Algorithms for Data in Motion. Lecture Notes in Computer Science, 2007, , 294-304. | 1.0 | 2 |
| 66 | Detecting False Matches in String-Matching Algorithms. Algorithmica, 1997, 18, 512-520. | 1.0 | 1 |
| 67 | Parallel scheduling problems in next generation wireless networks. Networks, 2005, 45, 9-22. | 1.6 | 1 |
| 68 | Fractal Modeling of IP Network Traffic at Streaming Speeds. , 2006, , . | | 1 |
| 69 | The Graham-Knowlton Problem Revisited. Theory of Computing Systems, 2006, 39, 399-412. | 0.7 | 1 |
| 70 | Modeling collaboration in academia. , 2014, , . | | 1 |
| 71 | Stochastic Data Streams. Lecture Notes in Computer Science, 2009, , 55-55. | 1.0 | 1 |
| 72 | Parallel two dimensional witness computation. Information and Computation, 2004, 188, 20-67. | 0.5 | 0 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 73 | Efficient String Matching Algorithms for Combinatorial Universal Denoising. , 0, , . | | 0 |
| 74 | Studying the source code of scientific research. SIGKDD Explorations: Newsletter of the Special Interest Group (SIG) on Knowledge Discovery & Data Mining, 2013, 14, 59-62. | 3.2 | 0 |
| 75 | Analyses of Cardinal Auctions. Algorithmica, 2015, 71, 889-903. | 1.0 | 0 |
| 76 | Streaming Algorithms for Measuring H-Impact. , 2017, , . | | 0 |
| 77 | Data management and mining in internet ad systems. Proceedings of the VLDB Endowment, 2010, 3, 1655-1656. | 2.1 | 0 |