

FERDINANDO CICALEASE

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EDUCATION

PhD in Computer Science, University of Salerno, 2001

Laurea degree in Informatics, University of Salerno, 1995

EMPLOYMENT

Associate Professor, Department of Computer Science, University of Verona, Italy 2014 - present

Associate Professor, Department of Computer Science and Appl., University of Salerno, Italy 2006 - 2014

Research Group Leader, “Combinatorial Search Algorithms in Bioinformatics”, Faculty of Technology, Bielefeld University, Germany 2004 - 2009

Assistant Professor, Department of Computer Science and Appl., University of Salerno, Italy 2001 - 2006

AWARDS

ISAAC 2015 - Best paper Award for the article *Trading off Worst and Expected Cost in Decision Tree Problems*, co-authored with A. Saettler and E. Laber, 2015

Sofja Kovalevskaja Award, Alexander von Humboldt Foundation and the German Federal Ministry of Education and Research, 2004

Best Italian PhD Thesis in Theor. Comp. Science, Italian Chapter of the EATCS, 2001

FUND-RAISING

Sofja Kovalevskaja Award, grant size **700 000 Euro**, Alexander von Humboldt Foundation and German Federal Ministry of Education and Research, 2004 - 2009 (Principal Investigator)

DFG Research Grant, *Advances in Search and Sorting*, grant size: **120 000 Euro**, Deutsche Forschungsgemeinschaft, 2007 - 2010 (cooperation partner)

ZiF Cooperation Group Programme, grant size: **50 000 Euro**, Center for Interdisciplinary Research (ZiF), Bielefeld, 2010 - 2013 (Principal Investigator)

FELLOWSHIPS AND HONORS

DAAD fellowship, Visiting researcher at Department of Computer Science, Freie Universität Berlin, Germany, 2 months, 2011

Marie Curie fellowship, Visiting professor at Alfréd Rényi Institute of Mathematics, Hungarian Academy of Sciences, Budapest, Hungary, 6 months, EU-FP6 ToK HUBI, 2009 - 2010

Marie Curie fellowship, EU Research Training Network *COMBSTRU: Combinatorial Structure of Intractable Problems*, 2 year contract interrupted for taking up the research group leadership in Bielefeld, 2004

DAAD fellowship, Visiting researcher at Center for Biotechnology, Bielefeld University, Germany, 6 weeks, 2004

ZiF fellowship, Visiting researcher at the Bielefeld Center for Interdisciplinary Research (ZiF), within the Research Group *General Theory of Information Transfer and Combinatorics*, 2002 - 2003

COST Action fellowship, Visiting researcher at Faculty of Informatics, Vienna University of Technology, 6 weeks, 2000

CNR fellowship, Italian Council of Research fellowship for a research visit to Middlesex University, London, UK, 8 months, 1995 - 1996

Erasmus fellowship, Middlesex University, London, UK, 3 months, 1993

PROGRAMME COMMITTEE MEMBERSHIPS IN INTERNATIONAL SYMPOSIA

AAIM 2016, 11th Intl. Conf. on Algorithmic Aspects of Information and Management, Bergamo, Italy, 18-20 July 2016

CPM 2015, 26th Annual Symp. on Combinatorial Pattern Matching, Ischia, Italy, 29 June-1 July 2015 (**co-chair**)

SPIRE 2014, 21st Intl. Symp. on on String Processing and Information. Retrieval, Ouro Preto, Minas Gerais, Brazil, 20-23 Oct. 2014

ICTCS 2014, 15th Italian Conf. on Theoretical Computer Science, Perugia, Italy, 17-19 Sep. 2014

FCT 2013, 19th Intl. Symp. on Fundamentals of Computation Theory, Liverpool, United Kingdom, 19-21 Aug. 2013

Search Methodologies III, ZiF - Center for Interdisciplinary Research, Bielefeld, Germany, 3-7 Oct. 2012 (**co-chair**)

CPM 2012, 23rd Annual Symp. on Combinatorial Pattern Matching, Helsinki, Finland, 3-5 July 2012

SOFSEM 2012, 38th Intl. Conf. on Current Trends in Theory and Practice of Computer Science, Špindlerův Mlýn, Czech Republic, 21-27 Jan. 2012

ICALP2011GT, Algorithms and data structures for selection, identification and encoding, ICALP 2011 Workshop, Zurich, Switzerland, 3 July 2011 (**co-chair**)

CCP 2011, Intl. Conf. on Data Compression, Communication, and Processing, Palinuro, Italy, 21-24 June 2011

Search Methodologies II, ZiF - Center for Interdisciplinary Research, Bielefeld, Germany, 25-29 Oct. 2010 (**co-chair**)

Search Methodologies, Dagstuhl Seminar 0928, Leibniz-Zentrum für Informatik, Germany, 5-10 July 2009 (**co-chair**)

LATIN 2008, Latin American Theoretical Informatics Symposium, Buzios, Rio de Janeiro, Brazil, 7-11 Apr. 2008

CASB 2006, Intl. Conf. on Computational and Systems Biology, Dallas, USA 13-14 Nov. 2006

COSSAC 2001, Combinatorics of Searching, Sorting & Coding, Ischia, Italy, 7-9 Sep. 2001 (**co-chair**)

SMI '96, Intelligent Multimedia Systems, Ravello, Italy, 13-15 Nov. 1996

EDITORIAL ACTIVITY

Algorithmica, special issue on *Combinatorial Pattern Matching*, vol. 79 (3), 2017, pp. 797–883

Algorithmica, special issue on *Group Testing and Compressed Sensing*, vol. 67 (3), 2013

Lecture Notes in Computer Science Festschrift, *Information Theory, Combinatorics and Search Theory*, vol. 7777, 2013

Discrete Applied Mathematics, special issue on *Combinatorics of Searching, Sorting, and Coding*, vol. 137 (1), 2004

OTHER SCIENTIFIC RESPONSIBILITIES

External referee for: US National Science Foundation (NSF), US National Security Agency (NSA), United States-Israel Binational Science Foundation (BSF), Italian Ministry for Education, University, and Research (MIUR)

Referee for international journals: ACM Transactions on Algorithms, Algorithmica, Central European Journal of Mathematics, Computers and Operations Research, Discrete Applied Mathematics, IEEE/ACM Transactions on Computational Biology and Bioinformatics, IEEE Transactions on Industrial Applications, IEEE Transactions on Information Theory, Information Processing Letters, Journal of Combinatorial Theory, Journal of Discrete Algorithms, SIAM Journal on Computing, Soft Computing, Theoretical Computer Science, and others

Referee for international conferences: ESA, ICALP, ICTCS, ISAAC, ISIT, LATIN, MICAI, MFCS, SIROCCO, SODA, STACS, WABI, and others

PhD SUPERVISION, MENTORING

PhD programme committee membership

- *Computer science PhD programme*, University of Salerno, Italy, 2006 - present
- *Bioinformatics PhD programme*, programme of the University of Benevento, Italy, 2008 - 2009
- *International Graduate School in Bioinformatics and Genome Research*, Bielefeld University, Germany, 2005 - 2009

Phd Supervisor of

- Christian Heup, thesis on *L-Identification entropy for sources*, defended (with distinction) on December 11, 2006 at the Faculty of Mathematics, Bielefeld University
- Travis Gagie, thesis on *New Algorithms and Lower Bounds for Sequential-Access Data Compression*, defended (top grade) on July 27, 2009 at the Faculty of Technology, Bielefeld University
- José Amgarten Quitzau, thesis on *Biological Applications for De Bruijn Subgraphs and Interval Group Testing*, defended (top grade) on March 25, 2010 at the Faculty of Technology, Bielefeld University

PostDoc Mentor of Hans-Michael Kaltenbach (2006), Zsuzsanna Lipták (2007-2009, now assistant professor at University of Verona, Italy), Martin Milanič (2007-2009, now assistant professor at University of Primorska, Slovenia), Julia Mixtaki-Zakotnik (2008), Yasmin Rios Solis (2007, now associate professor at Universidad Autónoma de Nuevo León, Mexico)

TEACHING

Invited Lectures at International Schools:

- Senior Lecturer for the **5th Emléktábla Workshop** of the János Bolyai Mathematical Society and the Alfréd Rényi Institute of Mathematics, Budapest, Hungary, 2013
- Invited Lecturer at the **Doctoral School of Mathematics and Computer Science**, University of Primorska, Koper, Slovenia, 2012

At University of Verona:

- *Algorithm Design* (Aca Yr 2016/17); 1-semester course (48 hours), 1st year masters program, 20-30 students, sole responsible
- *Algorithms for Bioinformatics* (AcaYr's 2014/15, 2015/16, 2016/17); 1-semester course (60 hours), 2nd year bachelor program, 60-80 students, sole responsible
- *Computational Complexity* (AcaYr's 2014/15, 2015/16); 1-semester course (60 hours), 1st year masters program, 40-60 students, sole responsible

At University of Salerno:

- *Computer Networks* (AcaYr 2013/14); 1-semester course (84 hours), 2nd year bachelor program, 60-80 students, sole responsible
- *Operating Systems* (AcaYr's 2008/9, 2009/10, 2010/11, 2011/12); 1-semester course (84 hours), 1st year bachelor program, 60-80 students, sole responsible
- *Basic Algorithmics* (Aca Yr 2010/11); 1-semester course (60 hours), 1st year bachelor program, 80-100 students, sole responsible
- *Information Theory* (AcaYr's 2002/3, 2003/4, 2006/7, 2007/8, 2008/9, 2009/10); 1-semester course (24 hours), 1st year masters program, 60-70 students, sole responsible
- *Laboratory of Operating Systems* (AcaYr's 2000/1, 2006/7); 1-semester course (64 hours), 2nd year bachelor program, 100-120 students, sole responsible
- *Programming Languages I* (AcaYr 2003/4); 1-semester course (64 hours), 1st year bachelor program, 100-120 students, sole responsible
- *Basic Computer Science* (AcaYr's 2000/1, 2001/2); 1-semester course (64 hours), 1st year bachelor program, 100-120 students, sole responsible
- *Laboratory of Algorithms and Data Structures* (AcaYr 2000/1); 1-semester course (64 hours), 2nd year bachelor program, 80-100 students, T.A.

At Bielefeld University:

- *Advanced algorithmic techniques for Bioinformatics* (AcaYr 2007/8); 1-semester course (72 hours), 3rd year bachelor program, 50-60 students, with Zs. Lipták
- *Elements of Combinatorics for Computer Scientists* (AcaYr's 2005/6, 2006/7); 1-semester course (56 hours), masters and PhD program, 15-25 students, sole responsible
- *Complex Interactions in Molecular Systems: A Game Theoretic Approach* (AcaYr 2005/6); 1-semester course (56 hours), masters and PhD program, 10-20 students, sole responsible

For the Pan-European MSc Applied Informatics Programme, Middlesex University of London and University of Salerno:

- *Intelligent Tutoring Systems*, (AcaYr 1994/5); 1 month course (16 hours), masters level, 20 students, sole responsible

SELECTED TALKS (only invited presentations)

ISAIM 2014 Intl. Symp. on Artificial Intelligence and Mathematics, Jan. 2014. Stream on Boolean and pseudo-Boolean Functions. Talk on *Function Evaluation: decision trees optimizing simultaneously worst and expected testing cost*

16th EURO - INFORM Joint Intl. Conference, July 2013. Talk on *Evaluation of Boolean Functions with Non-Uniform Costs: Beyond Monotonicity*

IMA Workshop on "Group Testing Designs, Algorithms, and Applications to Biology", Feb. 2012. Talk on *Competitive Testing for Evaluating Priced Functions*

48th Annual Allerton Conference, University of Illinois at Urbana-Champaign, Sept. 2010. Talk on *Combinatorial structures for group testing and its applications*

Workshop on Data Compression, Bielefeld, July 2009. Talk on *Searching with little structure*

DIMACS-RUTCOR Workshop on Boolean and Pseudo-Boolean Functions, New Brunswick, Jan. 2009. Talk on *Competitive evaluation of threshold functions and game trees in the priced information model*

Dagstuhl Seminar 08301 on “Group testing in the Life Sciences”, Dagstuhl, July 2008. Talk on *2-Stage Fault-tolerant interval group testing*

Expert workshop on “Boolean functions”, CRI, Haifa, Israel, Jan. 2008. Talk *On the competitive ratio of evaluating priced functions*

Mini-conference on Applied Combinatorics, Columbia, SC, US, Oct. 2007. Talk on *A linear programming approach to the evaluation of priced functions*

SIAM Conference on Discrete Mathematics 06, Victoria, British Columbia, Canada, June 2006. Invited talk on *Searching with lies under error cost constraints*

Workshop “Erdős Magic for Algorithms and Games”, Bertinoro, Italy, Apr. 2005. Talk on *Optimal group testing algorithms with interval queries and their application to splice site detection*

Workshop on “Combinatorial Search”, Budapest, Hungary, Apr. 2005. Talk on *Querying with priced information*

Workshop on “Search, Sorting and Coding”, Bielefeld, Germany, Oct. 2000. Talk on *Search with delays and erasure-errors*

Conference on “Search and Communication Complexity”, Balatonlelle, Hungary, July 2000. Talk on *New results on the Ulam-Rényi game*

LANGUAGE SKILLS

Italian, *mother tongue*; English, *fluent*; German, *fair*; Hungarian, *fair*

PUBLICATIONS

Book

1. F. Cicalese, **Fault Tolerant Search Algorithms**, Series: *Monographs in Theoretical Computer Science. An EATCS Series*, ISBN: 978-3-642-17326-4, Springer-Verlag, 2013.

Book Chapters

2. F. Cicalese, F. Montagna, *Ulam-Rényi Game Based Semantics for T-Norm Based Logics*, in: **Handbook of Mathematical Fuzzy Logic (Studies in Logic)**, P. Cintula, C. Fermüller, C. Noguera (Eds.), College Publications, to appear.
3. F. Cicalese, D. Mundici, *Recent developments of feedback coding, and its relations with many-valued logic*, in: **Proof, Computation and Agency - Logic at the Crossroads**, J. van Benthem, A. Gupta, R. Parikh (Eds.), Springer-Verlag, Synthese Library 352, pp 115–131, 2011.
4. F. Cicalese, C. Deppe, *Q-ary Ulam-Rényi game with constrained lies*, in: **General Theory of Information Transfer and Combinatorics**, R. Ahlswede (Ed.), Lecture Notes in Computer Science, Springer-Verlag, Vol. 4123, pp. 663-679 2006.
5. F. Cicalese, D. Mundici, *Learning and the Art of Fault-tolerant Guesswork*, in: **Adaptivity and Learning - An Interdisciplinary Debate**, R. Khün, R. Menzel, W. Menzel, U. Ratsch, M.M. Richter, I.O. Stamatescu (Eds.), Springer-Verlag, pp. 115-140, 2003.
6. F. Cicalese, D. Mundici, U. Vaccaro, *Rota-Metropolis cubic logic and Ulam-Rényi games*, in: **Algebraic Combinatorics and Computer Science - A Tribute to Giancarlo Rota**, D. Senato and H. Crapo (Eds.), Springer-Verlag, pp.197-244, 2000.

Volumes Edited

7. **Combinatorial Pattern Matching - 26th Annual Symposium, CPM 2015**, Lecture Notes in Computer Science, vol. 9133, 2015 (co-edited with E. Porat and U. Vaccaro).
8. **Group Testing and Compressed Sensing**, *Special Issue of Algorithmica*, vol. 67, Issue 3, 2013 (co-edited with E. Porat)
9. **Information Theory, Combinatorics, and Search Theory**, Lecture Notes in Computer Science, vol. 7777, 2013 (co-edited with H. Aydinian and C. Deppe).
10. **Search Methodologies**, *Dagstuhl Seminar Proceedings*, vol. 09281, Schloss Dagstuhl - Leibniz-Zentrum für Informatik, Germany, 2009 (co-edited with R. Ahlswede and U. Vaccaro).
11. **1st International Workshop on Combinatorics of Searching, Sorting, and Coding (COSSAC'01)**. *Special Issue of Discrete Applied Mathematics*, vol. 137, Issue 1, 2004 (co-edited with D. Mundici and U. Vaccaro).

In Journals

12. F. Cicalese, E. Laber, A. Saettler, *Decision Trees for Function Evaluation: Simultaneous Optimization of Worst and Expected Cost*, **Algorithmica**, vol. 79 (3), pp 763-796, 2017.
13. A. Saettler, E. Laber, F. Cicalese, *Trading Off Worst and Expected Cost in Decision Tree Problems*, **Algorithmica**, vol. 79 (3), pp 886-908, 2017.
14. F. Cicalese, B. Keszegh, B. Lidický, D. Pálvölgyi, T. Valla, *On the tree search problem with non-uniform costs*, **Theoretical Computer Science**, vol. 647, pp. 22-32, 2016.
15. F. Cicalese, M. Milanič, R. Rizzi, *On the complexity of the vector connectivity problem*, **Theoretical Computer Science**, vol. 591, pp. 60-71, 2015.
16. F. Cicalese, E. Laber, A. Saettler, *Approximating decision trees with value dependent testing costs*, to appear in **Information Processing Letters**, vol. 115, pp. 594-599, 2015.
17. F. Cicalese, G. Cordasco, L. Gargano, M. Milanič, G. Peters, U. Vaccaro, *Spread of Influence in Weighted Networks under Time and Budget Constraints*, **Theoretical Computer Science**, vol. 586, pp. 40-58, 2015.
18. F. Cicalese, T. Jacobs, E. Laber, M. Molinaro, *Improved Approximation Algorithms for the Average-Case Tree Searching Problem*, **Algorithmica**, vol. 68 (4), pp 1045-1074, 2014.

19. F. Cicalese, *Perfect Strategies for the Ulam-Rényi Game with Multi-interval Questions*, **Theory of Computing Systems**, vol. 54, pp. 578–594, 2014.
20. F. Cicalese, G. Cordasco, L. Gargano, M. Milanič, U. Vaccaro, *Latency-bounded target set selection in social networks*, **Theoretical Computer Science**, vol. 535, pp. 1–15, 2014.
21. F. Cicalese, E. Laber, O. Weimann, R. Yuster, *Approximating the Maximum Consecutive Subsums of a Sequence*, **Theoretical Computer Science**, vol. 525, pp. 130–137, 2014.
22. F. Cicalese, M. Milanič, U. Vaccaro, *On the approximability and exact algorithms for vector domination and related problems in graphs*, **Discrete Applied Mathematics**, vol. 161, pp. 750–767, 2013.
23. F. Cicalese, T. Jacobs, E. Laber, C. Valentim, *The Binary Identification Problems for Weighted Trees*, **Theoretical Computer Science**, vol. 459, pp. 100–112, 2012.
24. F. Cicalese, P.L. Erdős, Zs. Lipták, *A Linear Algorithm for String Reconstruction in the Reverse Complement Equivalence Model*, **Journal of Discrete Algorithms**, vol. 14, pp. 37–54, 2012.
25. P. Burcsi, F. Cicalese, G. Fici, Zs. Lipták, *On Approximate Jumbled Pattern Matching in Strings*, **Theory of Computing Systems**, vol. 50, pp. 35–51, 2012.
26. F. Cicalese, M. Milanič, *Graphs of separability at most two*, **Discrete Applied Mathematics**, vol. 160, pp. 685–696, 2012.
27. P. Burcsi, F. Cicalese, G. Fici, Zs. Lipták, *Algorithms for Jumbled Pattern Matching in Strings*, **International Journal of Foundations of Computer Science**, vol. 23 (2), pp. 357–374, 2012.
28. F. Cicalese, E. Laber, *The Competitive Evaluation Complexity of Monotone Boolean Functions*, **Journal of the ACM**, vol. 58 (3), Article no. 9, 2011.
29. F. Cicalese, T. Jacobs, E. Laber, M. Molinaro, *On the complexity of searching in trees and partially ordered structures*, **Theoretical Computer Science**, vol. 412, pp. 6879–6896, 2011.
30. F. Cicalese, T. Gagie, E. Laber, M. Milanič, *Competitive Boolean Function Evaluation. Beyond Monotonicity and the Symmetric case*, **Discrete Applied Mathematics**, vol. 159, pp. 1070–1078, 2011.
31. F. Cicalese, M. Milanič, *Competitive Evaluation of Threshold Functions in the Priced Information Model*, **Annals of Operations Research**, vol. 188 (1), pp. 111–132, 2011.
32. F. Cicalese, F. Manne, Q. Xin, *Faster Centralized Communication in Radio Networks*, **Algorithmica**, vol. 54 (2), pp. 226–242, 2009.
33. R. Ahlswede, F. Cicalese, C. Deppe, U. Vaccaro, *Two Batch Search with Lie Cost*, **IEEE Transactions on Information Theory**, vol. 55 (4), pp. 1433–1439, 2009.
34. R. Ahlswede, F. Cicalese, C. Deppe, *Searching with lies under error cost constraints*, **Discrete Applied Mathematics**, vol. 156, pp. 1444–1460, 2008.
35. F. Cicalese, P. Damaschke, L. Tansini, S. Werth, *Overlaps Help: Improved Bounds for Group Testing with Interval Queries*, **Discrete Applied Mathematics**, vol. 155, pp. 288–299, 2007.
36. F. Cicalese, C. Deppe, *Perfect Minimally Adaptive q -ary Search with Unreliable Tests*, **Journal of Statistical Planning and Inference**, vol. 137, pp. 162–175, 2007.
37. F. Cicalese, L. Gargano, U. Vaccaro, *A Note on Approximation of Uniform Distributions from Variable-to-Fixed Length Codes*, **IEEE Transactions on Information Theory**, vol. 52 (8), pp. 3772–3777, 2006.
38. F. Cicalese, P. Damaschke, U. Vaccaro, *Optimal Group Testing Algorithms with Interval Queries and Their Application to Splice Site Detection*, **International Journal of Bioinformatics Research and Applications**, Vol. 1 (4), pp. 363–388, 2005.
39. R. Ahlswede, F. Cicalese, C. Deppe, *Searching with lies under error transition cost constraints*, **Electronic Notes in Discrete Mathematics**, Vol 21, pp. 173–179, 2005.
40. F. Cicalese, C. Deppe, *Q -ary Ulam-Rényi game with constrained lies*, **Electronic Notes in Discrete Mathematics**, Vol 21, pp. 255–261, 2005.

41. F. Cicalese, L. Gargano, U. Vaccaro, *On Searching Strategies, Parallel Questions, and Delayed Answers*, **Discrete Applied Mathematics**, Vol. 144 (3), pp. 247-262, 2004.
42. F. Cicalese, U. Vaccaro, *Bounding the Average Length of Optimal Source Codes via Majorization Theory*, **IEEE Transactions on Information Theory**, Vol. 50 (4), pp. 633-637, 2004.
43. F. Cicalese, U. Vaccaro, *Binary Search with Delayed and Missing Answers*, **Information Processing Letters**, Vol. 85 (5), pp. 239-247, 2003.
44. F. Cicalese, U. Vaccaro, *Supermodularity and Subadditivity Properties of the Entropy on the Majorization Lattice*, **IEEE Transactions on Information Theory**, Vol. 48 (4), pp. 933-938, 2002.
45. F. Cicalese, D. Mundici, U. Vaccaro, *Least adaptive optimal search with unreliable tests*, **Theoretical Computer Science**, Vol. 270 (1-2), pp. 877-893, 2002.
46. F. Cicalese, D. Mundici, *Perfect 2-fault tolerant search with minimum adaptiveness*, **Advances in Applied Mathematics**, Vol. 25, pp. 65-101, 2000.
47. F. Cicalese, U. Vaccaro *An Improved Heuristic for the "Ulam-Rényi Game"*, **Information Processing Letters**, Vol. 73 (3-4), pp. 119-124, 2000.
48. F. Cicalese, U. Vaccaro, *Optimal strategies against a liar*, **Theoretical Computer Science**, Vol. 230, pp. 167-193, 2000.
49. F. Cicalese, V. Loia, *A Fuzzy Evolutionary Approach to the Classification Problem*, **Journal of Intelligent and Fuzzy Systems**, Vol. 6, pp. 117-129, 1998.
50. F. Cicalese, A. Gisolfi, *Classifying through a fuzzy algebraic structure*, **Fuzzy Sets and Systems**, Vol. 78, pp. 317-331, 1996.

In Conference Proceedings

51. F. Cicalese, L. Gargano, U. Vaccaro, *How to find a joint probability distribution of minimum entropy (almost) given the marginals*, in: Proc. of International Symposium in Information Theory (**ISIT 2017**), IEEE Press, pp. 2173-2177, 2017.
52. F. Cicalese, L. Gargano, U. Vaccaro, *$H(X)$ vs. $H(f(X))$* , in: Proc. of International Symposium in Information Theory (**ISIT 2017**), IEEE Press, pp. 51-55, 2017.
53. F. Cicalese, L. Gargano, U. Vaccaro, *Approximating probability distributions with short vectors, via information theoretic distance measures*, in: Proc. of International Symposium in Information Theory (**ISIT 2016**), IEEE Press, pp. 1138-1142, 2016.
54. H. Aydinian, F. Cicalese, C. Deppe, V. Lebedev, *A combinatorial model of two-sided search* in: Proc. of the 42st Intl. Conference on Current Trends in Theory and Practice of Computer Science (**SOFSEM 2016**), Lecture Notes in Computer Science, Springer-Verlag, Vol. 9587, pp. 148-160, 2016.
55. F. Cicalese, E. Laber, A. Saettler, *Trading off Worst and Expected Cost in Decision Tree Problems*, in: Proc. of the 26th International Symposium on Algorithms and Computation (**ISAAC 2015**), Lecture Notes in Computer Science, Springer-Verlag, Vol. 9472, pp. 223-234, 2015.
56. F. Cicalese, B. Keszegh, B. Lidický, D. Pálvölgyi, T. Valla, *On the Tree Search Problem with Non-uniform Costs*, in: Proc. of the 41st Workshop on Graph Theoretical Concepts in Computer Science (**WG 2015**), Lecture Notes in Computer Science, Springer-Verlag, Vol. 9224, pp. 90-102, 2015.
57. F. Cicalese, E. Laber, A. Saettler, *Diagnosis determination: decision trees optimizing simultaneously worst and expected testing cost*, in: Proc. of the 31st International Conference on Machine Learning (**ICML 2014**), pp. 414-422, 2014.
58. W. Bardales, F. Cicalese, E. Laber, *On lower bounds for the Maximum Consecutive Subsums Problem and the $(\min, +)$ -convolution*, in: Proc. of International Symposium in Information Theory (**ISIT 2014**), IEEE Press, pp. 1807-1811, 2014.

59. F. Cicalese, G. Cordasco, L. Gargano, M. Milanić, J.G. Peters, U. Vaccaro *How to go Viral: Cheaply and Quickly*, in: Proc. of the 7th International Conference on Fun with Algorithms (**FUN 2012**), Lecture Notes in Computer Science, Springer-Verlag, Vol. 8496, pp. 100-112, 2012.
60. F. Cicalese, E. Laber, A. Saettler, *Function Evaluation: decision trees optimizing simultaneously worst and expected testing costs*, in: Proc. of the 13th International Symposium on Artificial Intelligence and Mathematics (**ISAIM 2014**), 2014.
61. F. Cicalese, T. Gagie, E. Giaquinta, E. Laber, Zs. Lipták, R. Rizzi, A.I. Tomescu, *Indexes for Jumbled Pattern Matching in Strings, Trees and Graphs*, in: Proc. of the 20th String Processing and Information Retrieval Symposium (**SPIRE 2013**), Lecture Notes in Computer Science, Springer-Verlag, Vol. 8214, pp. 56-63, 2013.
62. F. Cicalese, L. Gargano, U. Vaccaro, *Information Theoretic Distance Measures between Income Distributions*, in: Proc. of International Symposium in Information Theory (**ISIT 2013**), IEEE Press, pp. 409 - 413, 2013.
63. F. Cicalese, G. Cordasco, L. Gargano, M. Milanić, U. Vaccaro, *Latency-Bounded Target Set Selection in Social Networks*, in: Proc. of Computability in Europe - The Nature of Computation (**CiE 2013**), Lecture Notes in Computer Science, Springer-Verlag, vol. 7921, pp. 65-77, 2013.
64. F. Cicalese, E. Laber, O. Weimann, R. Yuster, *Near Linear Time Construction of an Approximate Index for All Maximum Consecutive Sub-sums of a Sequence*, in: Proc. of the 23rd Annual Symposium on Combinatorial Pattern Matching (**CPM 2012**), Lecture Notes in Computer Science, Springer-Verlag, Vol. 7354, pp. 149-158, 2012.
65. F. Cicalese, *The Multi-interval Ulam-Rényi Game*, in: Proc. of the 6th International Conference on Fun with Algorithms (**FUN 2012**), Lecture Notes in Computer Science, Springer-Verlag, Vol. 7288, pp. 69-80, 2012.
66. F. Cicalese, T. Jacobs, E. Laber, C. Valentim, *Binary Identification Problems for Weighted Trees*, in: Proc. of the 12th Algorithms and Data Structures Symposium (**WADS 2011**), Lecture Notes in Computer Science, Springer-Verlag, Vol. 6844, pp. 255-266, 2011.
67. F. Cicalese, M. Milanić, U. Vaccaro, *Hardness, approximability, and exact algorithms for vector domination and total vector domination in graphs*, in: Proc. of the 18th International Symposium on Fundamentals of Computer Theory (**FCT 2011**), Lecture Notes in Computer Science, Springer-Verlag, Vol. 6914, pp. 288-297, 2011.
68. F. Cicalese, U. Vaccaro, *Superselectors: Efficient Constructions and Applications*, in: Proc. of the 18th Annual European Symposium on Algorithms (**ESA 2010**), Lecture Notes in Computer Science, Springer-Verlag, Vol. 6346, pp. 207-218, 2010.
69. F. Cicalese, T. Jacobs, E. Laber, M. Molinaro, *On Greedy Algorithms for Decision Trees*, in: Proc. of the 21st International Symposium on Algorithms and Computation (**ISAAC 2010**), Lecture Notes in Computer Science, Springer-Verlag, Vol. 6507, pp. 206-217, 2010.
70. F. Cicalese, T. Jacobs, E. Laber, M. Molinaro, *On the Complexity of Searching in Trees: Average-case Minimization*, in: Proc. of the 37th International Colloquium on Automata, Languages and Programming (**ICALP 2010**), Lecture Notes in Computer Science, Springer-Verlag, Vol. 6198, pp. 527-539, 2010.
71. F. Cicalese, M. Milanić, *Graphs of Separability at Most Two: Structural Characterizations and Their Consequences*, in: Proc. of the 21st International Workshop on Combinatorial Algorithms (**IWOCA 2010**), Lecture Notes in Computer Science, Springer-Verlag, Vol. 6460, pp. 291-302, 2011.
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