FERDINANDO CICALESE

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TITOLI DI STUDIO

Dottorato in Informatica, Università degli Studi di Salerno, 2001

Laurea in Informatica, Università degli Studi di Salerno, 1995

POSIZIONI ACCADEMICHE

Professore Ordinario, Dipartimento di Informatica, Università degli Studi di Verona, 2022 -

Professore Associato, Dipartimento di Informatica, Università degli Studi di Verona, 2014 - 2022

Professore Associato, Dipartimento di Informatica ed Applicazioni., Università degli Studi di Salerno, Italia 2006 - 2014

Research Group Leader, "Combinatorial Search Algorithms in Bioinformatics", Faculty of Technology, Bielefeld University, Germania 2004 - 2009

Ricercatore Universitario, Dipartimento di Informatica ed Applicazioni., Università degli Studi di Salerno, Italia 2001 - 2006

PREMI e GRANTS

ISAAC 2015 - Best paper Award per l'articolo *Trading off Worst and Expected Cost in Decision Tree Problems*, in collaborazione con A. Saettler e E. Laber, 2015

Sofja Kovalevskaja Award 2004, per il progetto *Combinatorial Search Algorithms in Bioinformatics*. Premio dell' Alexander von Humboldt Foundation and the German Federal Ministry of Education and Research, assegnato ogni due anni a circa 10 giovani ricercatori di ogni nazionalità e disciplina, per condurre ricerca per 5 anni presso un'università tedesca. Success rate $\sim 10 - 15\%$.

Best Italian PhD Thesis in Theor. Comp. Science, premio per una delle due migliori tesi di dottorato in informatica teorica, del Capitolo Italiano dell'EATCS, 2001

GRANTS e BORSE DI STUDIO

European Research Council - Consolidator Grant 2013, research project on *Infomics - Algorithms and Methodological Tools for Information Management in the -omics Sciences* (Euro 1 144 800), selected for the second stage by panel PE6-Computer Science and Informatics (selection rate 14%). The project was not funded.

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

Granting scheme of Univ. of Salerno and the Provinces of Salerno and Avellino, 4 month grant awarded for a joint project with Freie Univeristät and Humboldt Universtität Berlin, 2012

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: Hungarian Bioinformatics*, 2009 - 2010

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

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

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 for a project on *Algorithms in Bioinformatics*, 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

RESPONSABILITÀ SCIENTIFICHE

a. Chair e PC-membership in Conferenze di rilevanza internazionale

- **ICLR 2022**, 10th Intl. Conf. Learning Representations, Virtual-only Conference, 25-29 Apr. 2022
- **NeurIPS 2021**, 35th Conf. on Neural Information Processing Systems, Virtual-only Conference, 6-14 Dec. 2021.
- **ICML 2021**, 38th Intl. Conf. on Machine Learning, Virtual-only Conference, 18-24 July 2021.
- **NeurIPS 2020**, 34th Conf. on Neural Information Processing Systems, Vancouver, Canada, 6-12 Dec. 2020.
- **ICML 2020**, 37th Intl. Conf. on Machine Learning, Vienna, Austria, 12-18 July 2020.
- **LATIN 2020**, 14th Latin American Theoretical Informatics Symposium, São Paulo, Brazil, 25-29 May 2020
- **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

b. **Attività di editore associato**
- **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

c. **Attività di revisione**
- **International Science Institutions.** I regularly serve as external expert reviewer for the following institutions: 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), Science Foundation Ireland (SFI), Swiss National Science Foundation (SNSF)
- **International journals:** I regularly serve as referee for 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, Machine Learning, SIAM Journal on Computing, Soft Computing, Theoretical Computer Science, and others
- **International conferences:** I regularly serve as a referee for ESA, ICALP, ICML, ICTCS, ISAAC, ISIT, LATIN, MICAI, MFCS, NeurIPS, SIROCCO, SODA, STACS, STOC, WABI, and others

d. **Conduzione di progetti e gruppi di ricerca**
- **Progetti Internazionali**:

  Search Methodologies, ZiF Cooperation Group Programme, 3 years, **Principal Investigator**, funded by Center for Interdisciplinary Research (ZiF), Bielefeld, Germany, 2010-2013

  Combinatorial Search Algorithms in Bioinformatics, 5 years, **Principal Investigator**, University of Bielefeld, funded by Alexander von Humboldt Foundation and German Federal Ministry of Education and Research, 2004 - 2009

  Advances in Search and Sorting, 3 years, **cooperation partner**, funded by German Research Foundation (DFG), 2007-2010

Approximation and Randomized Algorithms in Communication Networks (ARACNE), 3 years, funded by European Union FP6-RTN, 2000-2003

- **Progetti Nazionali**:

  Flussi di informazione in reti sociali, 2 years, Univ. of Salerno, 2013

  Analisi di Strutture e Dinamiche in Reti Complesse, 2 years, Univ. of Salerno, 2012

  Problemi Algoritmici e Computazionali in Reti Sociali, 2 years, Univ. of Salerno, 2011

  Studio della diffusione di Informazioni, Comportamenti e Dinamiche in Reti Complesse, 2 years, Univ. of Salerno, 2010

  Problemi algoritmici e sistemistici in reti sociali, 2 years, Univ. of Salerno, 2009

  Ricerca in gross moli di dati, 2 years, Univ. of Salerno, 2008

  Modelli, Architetture ed Applicazioni peer-to-peer, 2 years, Univ. of Salerno, 2007

  Comunicazione efficiente in reti wireless, 2 years, Univ. of Salerno, 2006

  Utilizzo Efficiente della rete fissa ad alta velocità e di Reti senza fili infrastrutturate, 2 years, PRIN 2001, MIUR, 2001

e. Partecipazione in commissioni di ateneo e altre attività di servizio
- **Programme director of the Phd Programme in Computer Science** at University of Verona, Italy, since 2022
- **Programme director of the Bioinformatics Bachelor degree** at University of Verona, Italy, 2015-2023
- Member of the **scientific committee of the Computer science PhD programme** at University of Verona, Italy, since 2017
- Member of the **scientific committee of the Computer Science and Information Engineering PhD Programme** at University of Salerno, Italy, 2013 - 2016
- Member of the **scientific committee of the Computer Science PhD programme** at University of Salerno, Italy, 2009 - 2012
- Member of the **scientific committee of the Bioinformatics PhD programme** at the University of Benevento, Italy, 2008 - 2009
- Member of the **scientific committee of the International Graduate School in Bioinformatics and Genome Research** at Bielefeld University, Germany, 2005 - 2009
- Member of the **selection committee for the best Italian PhD thesis in theoretical computer science** for the Italian Chapter of EATCS, 2018
- Member of the **selection committee of Computer Science PhD Programme** at University of Verona, 2019
- Member of the **selection committee for AdR3712/21 in Operating Research (MAT/09)**, University of Verona, 2021
- Head of the **selection committee for Associate Researcher (RTD-a) in Computer Science (INF/01)**, University of Verona, 2018

ATTIVITÀ DIDATTICA

Invited Lectures per Istituzioni Internazionali:
- Senior Lecturer per **5th Emléktábla Workshop**, János Bolyai Mathematical Society and Alfréd Rényi Institute of Mathematics, Budapest, Ungheria, 2013
- Invited Lecturer presso **Doctoral School of Mathematics and Computer Science**, University of Primorska, Koper, Slovenia, 2012

Università di Verona:
- *Algorithm Design* (AA 2016/17 - 2023-24), laurea magistrale in lingua inglese "Medical Bioinformatics"

- *Algoritmi per Bioinformatica* (AA 2014/15 - 2019/20); (60 ore), II anno, laurea triennale, 60-80 studenti
- *Complessità* (dall'AA 2014/15 ad oggi); I anno della Laurea Magistrale, 40-60 studenti
- *Metodi Informazionali* (AA 2020/21, 2021/22); (56 hours), II anno laurea triennale, 30-50 studenti
- *Computational Game Theory* (dall' AA 2021/22 ad oggi); Laurea Magistrale, 10-20 students, sole responsible

Università di Salerno:
- *Reti di Calcolartori* (AA 2013/14), Laurea Triennale in Informatica
- *Sistemi Operativi* (AA 2008/9, 2009/10, 2010/11, 2011/12), Laurea Triennale in Informatica
- *Informatica di Base* (AA 2000/1, 2001/2, 2010/11); Laurea Triennale in Informatica
- *Strumenti della Teoria dell'Informazione* (AA 2002/3, 2003/4, 2006/7, 2007/8, 2008/9, 2009/10), Laurea Magistrale in Informatica
- *Laboratorio di Sistemi Operativi* (AA 2000/1, 2006/7), Laurea Triennale in Informatica
- *Linguaggi di Programmazione I* (AcaYr 2003/4), Laurea Triennale in Informatica
- *Laboratorio di Algoritmi e Strutture Dati* (AA 2000/1), Laurea Triennale in Informatica

Bielefeld University:
- *Advanced algorithmic techniques for Bioinformatics* (AA 2007/8), 3rd year bachelor program Bioinformatics
- *Elements of Combinatorics for Computer Scientists* (AA 2005/6, 2006/7), masters and PhD programs of Bioinformatics and Computer Science
- *Complex Interactions in Molecular Systems: A Game Theoretic Approach* (AA 2005/6), masters and PhD program, Bioiformatics

Per il Pan-European MSc Applied Informatics Programme, Middlesex University of London e Università degli Studi di Salerno:
- *Intelligent Tutoring Systems*, (AA 1994/5) mini corso di un mese (16 hours), masters level

SUPERVISIONE DI TESI

a. Tesi di Laurea triennale
- Eros Rossi, thesis on "Analisi teorica e sperimentale di nuovi approcci ai codici D-ari di Fano", University of Verona, July 2018
- Davide Bianchin, thesis on "On a generative model of sequences based on approximate duplications", University of Verona, July 2017

b. Tesi di Laurea Magistrale e Master:
- Matteo Zeggiotti, thesis on "On the complexity of the RDIN Problem", University of Verona, July 2021
- Andrea Caucchiolo, thesis on "Complexity and Algorithmic Questions on the Directed Intersection Representation of DAGs", University of Verona, October 2020
- Eros Rossi, thesis on "Symbolwise MAP decoding for Multiple Deletion Channel: heuristics and experiments", University of Verona, October 2020

c. Tesi di Dottorato
- Andrea Caucchiolo, currently enrolled in the Computer Science Phd Programme, working on *Complexity of intersection representation of directed graphs*
- Dario Ostuni, currently enrolled in the Computer Science Phd Programme, working on *Computer systems for didactics and competitions*

- Massimiliano Rossi, thesis on *Algorithms and Data Structures for Coding, Indexing, and Mining of Sequential Data*, defended on February 17, 2020 at the Department of Computer Science, University of Verona (now PostDoc at University of Florida, US)

- 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

- 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 (now professor at Dalhousie University, Canada)

- Christian Heup, thesis on *L-Identification entropy for sources*, defended (with distinction) on December 11, 2006 at the Faculty of Mathematics, Bielefeld University

d. Membro della commissione di valutazione del Dottorato in Informatica di UniVR per : Andrea Caucchiolo (thesis on "Complexity of intersection representation of digraphs", 2021); Sara Giuliani (thesis on "BWT and string-complexity measures", 2019-21); Davide Cenzato (thesis on "On the BWT of string collections", 2019-21); Antonella Mensi (thesis on "Random Forests for Outlier Detection: Methodological Issues and Applications", 2018-21); Giulio Mazzi (thesis on "Rule-Based Policy Interpretation and Shielding for Partially Observable Monte Carlo Planning", 2018-21); Matteo Murari (thesis on "A Multi-Agent Approach for Cyber-Security Scenarios", 2019-20); Riccardo Mengoni (theis on "Quantum Machine Learning", 2016-19); Lorenzo Bottarelli (thesis on "Information Gathering Optimization for Environmental Monitoring", 2015-18)

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

f. Referee for PhD Program in Information Engineering, Department of Engineering and Information, University of Brescia, thesis "Information Theoretic View on Risk", candidate: Giorgio Arici, January 2019

ATTIVITÀ SEMINARIALE (solo presentazioni su invito)

a. Invited talks at International Research Centres and Universities

- **CS colloquium at Bar Ilan university**, Bar Ilan, Israel, Jan. 2022. Talk on *Machine teaching with limited information on the learner*

- **Rényi Institute "Seminar on Search",** Budapest, Hungary, Dec. 2020. Talk on *Complexity and algorithmic results on a novel information content representation of digraphs*

- **University of Liverpool, Department of Computer Science,** May 2013. Talk on *Combinatorial Search and Decision Trees*

- **PUC-Rio, Department of Computer Science,** Jan. 2013. Talk on *Approximate Pattern Matching with Applications to Bioinformatics*

- **Freie Universität Berlin, Department of Computer Science**, Aug. 2011. Talk on *Competitive analysis of function evaluation in the decision tree model with priced information*

- **University of Ljubljana "Seminar za teorijo grup in kombinatoriko",** Nov. 2010. Talk on *Searching in partially ordered structures: average-case minimization*

- **University of Primorska "Raziskovalni matematični seminar",** Nov. 2010. Talk on *Superselectors: Efficient Constructions and Applications*

- **University of Lugano,** Nov. 2009. Talk on *Combinatorial search algorithms for function evaluation*

- **Rényi Institute "Search Seminar",** Budapest, Oct. 2008. Talk on *Optimal, minimum interaction fault-tolerant search, with lie-costs*

- **Rényi Institute "Combinatorics Seminar",** Budapest, Sept. 2008. Talk on *Crossing antichains and the Boolean function evaluation*

b. **Invited talks at International Conferences and Workshops**
- **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*

c. **Contributed talks at International Conferences and Workshops**
I was speaker at the following conferences for presenting one of my papers (see list of publications): IWOCA2021, COCOON2020, ISIT2020, ICML2019, ISIT2019, ISIT2018, ISIT2017, ISAIM2014, SPIRE2013, CiE2013, CPM2012, FUN2012, WADS2011, FCT2011, ESA2010, IWOCA2010, ICALP2008, ISAAC2007, ISAAC2006, ESA2005, STOC2005, ISAAC2003, FUN2001, ISAAC2000, COCOON2000, ISIT2000, ESA1999, ICTCS'98, WILF'97, ISFL'97

CONOSCENZE LINGUISTICHE

Italiano, *lingua madre*; English, *fluent*; German, *fair*; Hungarian, *fair*

PUBBLICAZIONI

Monografie

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.

Contributi in Volumi Monografici

2. F. Cicalese, F. Montagna, *Ulam-Rényi Game Based Semantics for Fuzzy Logics*, in: **Handbook of Mathematical Fuzzy Logic (Studies in Logic)**, P. Cintula, C. Fermüller, C. Noguera (Eds.), College Publications, pp. 1029–1062, 2015.

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 Curati

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).

Su Riviste Internazionali

12. M. Bicego, F. Cicalese, *Computing Random Forest-distance in the presence of missing data*, **ACM Transactions on Knowledge Discovery from Data**, vol. 18, n. 180:1-18, 2024.

13. M. Bicego, F. Cicalese, A. Mensi, *RatioRF: a novel measure for Random Forest clustering based on the Tversky's ratio model*, **IEEE Transactions on Knowledge and Data Engineering Theory**, vol. 35, pp. 830-841, 2023.

14. A. Caucchiolo, F. Cicalese, *Hardness and approximation of multiple sequence alignment with column score*, **Theoretical Computer Science**, vol. 946, pp. 113683, 2023.

15. F. Cicalese, E. Laber, *On the star decomposition of a graph: Hardness results and approximation for the max-min optimization problem*, **Discrete Applied Mathematics**, vol. 289, pp 503-515, 2021.

16. F. Cicalese, Zs. Lipták, M. Rossi, *On infinite prefix normal words*, **Theoretical Computer Science**, vol. 859, pp. 134-148, 2021.

17. F. Cicalese, E. Laber, *Information Theoretical Clustering is Hard to Approximate*, **IEEE Transactions on Information Theory**, vol. 67 (1), pp. 586-597, 2021.

18. F. Cicalese, M. Rossi, *On the multi-interval Ulam-Rényi game: For 3 lies 4 intervals suffice*, **Theoretical Computer Science**, vol. 809, pp. 339-356, 2020.

19. F. Cicalese, L. Gargano, U. Vaccaro, *Minimum-Entropy Coupling and Their Applications*, **IEEE Transactions on Information Theory**, vol. 65 (6), pp. 3436-3451, 2019.

20. H.K. Aydinian, F. Cicalese, C. Deppe, V.S. Lebedev, *A Combinatorial Model of Two-Sided Search*, **International Journal of Foundation of Computer Science**, vol. 29 (4), pp. 481-504, 2018.

21. F. Cicalese, Zs. Lipták, M. Rossi, *Bubble-Flip – A new generation algorithm for prefix normal words*, **Theoretical Computer Science**, vol. 743, pp. 38-52, 2021.

22. F. Cicalese, L. Gargano, U. Vaccaro, *Bounds on the entropy of a function of a random variable and their applications*, **IEEE Transactions on Information Theory**, vol. 64 (4), pp. 2220-2230, 2018.

23. 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.

24. A. Saettler, E. Laber, F. Cicalese, *Trading Off Worst and Expected Cost in Decision Tree Problems*, **Algorithmica**, vol. 79 (3), pp 886-908, 2017.

25. F. Cicalese, B. Keszegh, B. Lidickỳ, D. Pálvölgyi, T. Valla, *On the tree search problem with non-uniform costs*, **Theoretical Computer Science**, vol. 647, pp. 22-32, 2016.

26. F. Cicalese, M. Milanič, R. Rizzi, *On the complexity of the vector connectivity problem*, **Theoretical Computer Science**, vol. 591, pp. 60-71, 2015.

27. 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.

28. 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.

29. 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.

30. F. Cicalese, *Perfect Strategies for the Ulam-Rényi Game with Multi-interval Questions*, **Theory of Computing Systems**, vol. 54, pp. 578–594, 2014.

31. 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.

32. 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.

33. 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.

34. F. Cicalese, T. Jacobs, E. Laber, C. Valentim, *The Binary Identification Problems for Weighted Trees*, **Theoretical Computer Science**, vol. 459, pp. 100–112, 2012.

35. 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.

36. 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.

37. F. Cicalese, M. Milanič, *Graphs of separability at most two*, **Discrete Applied Mathematics**, vol. 160, pp. 685–696, 2012.

38. 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.

39. F. Cicalese, E. Laber, *The Competitive Evaluation Complexity of Monotone Boolean Functions*, **Journal of the ACM**, vol. 58 (3), Article no. 9, 2011.

40. 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.

41. 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.

42. 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.

43. F. Cicalese, F. Manne, Q. Xin, *Faster Centralized Communication in Radio Networks*, **Algorithmica**, vol. 54 (2), pp. 226-242, 2009.

44. 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.

45. R. Ahlswede, F. Cicalese, C. Deppe, *Searching with lies under error cost constraints*, **Discrete Applied Mathematics**, vol. 156, pp. 1444-1460, 2008.

46. 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.

47. 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.

48. 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.

49. 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.

50. 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.

51. F. Cicalese, C. Deppe, *Q-ary Ulam-Rényi game with constrained lies*, **Electronic Notes in Discrete Mathematics**, Vol 21, pp. 255-261, 2005.

52. F. Cicalese, L. Gargano, U. Vaccaro, *On Searching Strategies, Parallel Questions, and Delayed Answers*, **Discrete Applied Mathematics**, Vol. 144 (3), pp. 247-262, 2004.

53. 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.

54. F. Cicalese, U. Vaccaro, *Binary Search with Delayed and Missing Answers*, **Information Processing Letters**, Vol. 85 (5), pp. 239-247, 2003.

55. 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.

56. F. Cicalese, D. Mundici, U. Vaccaro, *Least adaptive optimal search with unreliable tests*, **Theoretical Computer Science**, Vol. 270 (1-2), pp. 877-893, 2002.

57. F. Cicalese, D. Mundici, *Perfect 2-fault tolerant search with minimum adaptiveness*, **Advances in Applied Mathematics**, Vol. 25, pp. 65–101, 2000.

58. F. Cicalese, U. Vaccaro *An Improved Heuristic for the "Ulam-Rényi Game"*, **Information Processing Letters**, Vol. 73 (3-4), pp. 119-124, 2000.

59. F. Cicalese, U. Vaccaro, *Optimal strategies against a liar*, **Theoretical Computer Science**, Vol. 230, pp. 167-193, 2000.

60. F. Cicalese, V. Loia, *A Fuzzy Evolutionary Approach to the Classification Problem*, **Journal of Intelligent and Fuzzy Systems**, Vol. 6, pp. 117-129, 1998.

61. F. Cicalese, A. Gisolfi, *Classifying through a fuzzy algebraic structure*, **Fuzzy Sets and Systems**, Vol. 78, pp. 317-331, 1996.

In Atti di Conferenza

62. L. Marzari, D. Corsi, E. Marchesini, A. Farinelli, F. Cicalese, *Enumerating Safe Regions in Deep Neural Networks with Provable Probabillistic Guarantees*, in: Proc. of the 38th Annual AAAI Conference on Artificial Intelligence (**AAAI 2024**), pp. 21387-21394, 2024.

63. F. Cicalese, F. Ugazio, *On the Complexity and Approximation of Bounded Access Lempel Ziv Coding*, in: Proc. of the 28th International Conference on Deveopments in Language Theory (**DLT 2024**), Lecture Notes in Computer Science, Vol. 14791, pp. 114-130, 2024.

64. L. Marzari, D. Corsi, F. Cicalese, A. Farinelli, *The #DNN-Verification Problem: Counting Unsafe Inputs for Deep Neural Networks*, in: Proc. of the 32nd International Joint Conference on Artificial Intelligence (**IJCAI 2023**), pp. 217-224, 2023.

65. M. Bicego, F. Cicalese, *On the Good Behaviour of Extremely Randomized Trees in Random Forest-Distance Computation*, in: Proc. of the Joint European Conference on Machine Learning and Knowledge Discovery in Databases (**ECML PKDD 2023**), Lecture Notes in Computer Science, Vol. 14172, pp. 645-660, 2023.

66. V. Feitosa Souza, F. Cicalese, E. Sany Laber, M. Molinaro, *Decision Trees with Short Explainable Rules*, in: Proc. of the 36th Conference on Neural Information Processing Systems (**NeurIPS 2022**), 2022.

67. A. Mensi, F. Cicalese, M. Bicego, *Using Random Forest Distances for Outlier Detection*, in: Proc. of the 21st International Conference on Image Analysis and Processing (**ICIAP 2022**), Lecture Notes in Computer Science, Vol. 13233, pp. 75-86, 2022.

68. F. Cicalese, C. Dallard, M. Milanic, *On Constrained Intersection Representations of Graphs and Digraphs*, in: Proc. of the 33rd Intl. Symposium on Algorithms and Computation, (**ISAAC2022**), LIPIcs, vol. 248, 38:1 - 38:15, 2022

69. M. Raniero, M. Bicego, F. Cicalese, *Distance-Based Random Forest Clustering with Missing Data*, in: Proc. of the 21st International Conference on Image Analysis and Processing (**ICIAP 2022**), Lecture Notes in Computer Science, Vol. 13233, pp. 121-132, 2022.

70. A. Caucchiolo, F. Cicalese, *On the Intractability Landscape of Digraph Intersection Representations*, in: Proc. of the 33rd International Workshop on Combinatoria Algorithms (**IWOCA 2022**), Lecture Notes in Computer Science, Vol. 13270, pp. 270-284, 2022.

71. F. Cicalese, N. Pilati, *The Tandem Duplication Distance Problem is Hard over Bounded Alphabets*, in: Proc. of the 32nd International Workshop on Combinatoria Algorithms (**IWOCA 2021**), Lecture Notes in Computer Science, Vol. 12757, pp. 179-193, 2021.

72. F. Cicalese, M. Rossi, *On the Redundancy of D-ary Fano Codes*, in: Proc. of the 47th Intl. Conference on Current Trends in Theory and Practice of Computer Science (**SOFSEM 2021**), Lecture Notes in Computer Science, Vol. 12607, pp. 263-277, 2021.

73. A. Caucchiolo, F. Cicalese, *On the Complexity of Directed Intersection Representation of DAGs*, in: Proc. of the 26th Annual International Computing and Combinatorics Conference (**COCOON 2020**), Lecture Notes in Computer Science, Vol. 12273, pp. 554-565, 2020.

74. F. Cicalese, S. Filho, E. Laber, M. Molinaro, *Teaching with Limited Information on the Learner's Behaviour*, in: Proc. of the 36th International Conference on Machine Learning (**ICML 2020**), pp. 2016-2026, 2020.

75. F. Cicalese, E. Rossi, *On D-ary Fano Codes*, in: Proc. of International Symposium in Information Theory (**ISIT 2020**), IEEE Press, pp. 2365-2370, 2020.

76. F. Cicalese, E. Laber, L. Murtinho, *New results on information theoretic clustering*, in: Proc. of the 36th International Conference on Machine Learning (**ICML 2019**), pp. 1242-1251, 2019.

77. F. Cicalese, L. Gargano, U. Vaccaro, *An information Theoretic Approach to Probability Mass Function Truncation*, in: Proc. of International Symposium in Information Theory (**ISIT 2019**), IEEE Press, pp. 702-706, 2019.

78. F. Cicalese, Zs. Lipták, M. Rossi, *On Infinite Prefix Normal Words*, in: Proc. of the 45th Intl. Conference on Current Trends in Theory and Practice of Computer Science (**SOFSEM 2019**), Lecture Notes in Computer Science, Vol. 11376, pp. 122-135, 2019.

79. F. Cicalese, U. Vaccaro, *Maximum Entropy Interval Aggregations*, in: Proc. of International Symposium in Information Theory (**ISIT 2018**), IEEE Press, pp. 1764-1768, 2018.

80. F. Cicalese, Zs. Lipták, M. Rossi, *Bubble-Flip - A New Generation Algorithm for Prefix Normal Words*, in: Proc. of the 12th Intl. Conference on Language and Automata Theory and Applications (**LATA 2018**), to appear, 2018.

81. 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.

82. 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.

83. 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.

84. 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, Vol. 9587, pp. 148-160, 2016.

85. 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, Vol. 9472, pp. 223-234, 2015.

86. 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, Vol. 9224, pp. 90-102, 2015.

87. 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.

88. 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.

89. F. Cicalese, G. Cordasco, L. Gargano, M. Milanic, 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, Vol. 8496, pp. 100-112, 2012.

90. 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.

91. 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, Vol. 8214, pp. 56-63, 2013.

92. 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.

93. F. Cicalese, G. Cordasco, L. Gargano, M. Milanič, 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, Vol. 7921, pp. 65-77, 2013.

94. 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, Vol. 7354, pp. 149-158, 2012.

95. 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, Vol. 7288, pp. 69-80, 2012.

96. F. Cicalese, T. Jacobs, E. Laber, C. Valentim, *Binary Identification Problems for Weighted Trees*, in: Proc. of the 12th Algorthms and Data Structures Symposium (**WADS 2011**), Lecture Notes in Computer Science, Vol. 6844, pp. 255-266, 2011.

97. F. Cicalese, M. Milanič, 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, Vol. 6914, pp. 288-297, 2011.

98. 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, Vol. 6346, pp. 207-218, 2010.

99. F. Cicalese, T. Jacobs, E. Laber, M. Molinaro, *On Greedy Algorithms for Decision Trees*, in: Proc. of the 21st nternational Symposium on Algorithms and Computation (**ISAAC 2010**), Lecture Notes in Computer Science, Vol. 6507, pp. 206-217, 2010.

100. 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, Vol. 6198, pp. 527-539, 2010.

101. F. Cicalese, M. Milanič, *Graphs of Separability at Most Two: Structural Characterizations and Their Consequences*, in: Proc. of the 21st International Workshop on Combinatoria Algorithms (**IWOCA 2010**), Lecture Notes in Computer Science, Vol. 6460, pp. 291-302, 2011.

102. F. Cicalese, P.L. Erdős, and Zs. Lipták, *Efficient Reconstruction of RC-Equivalent Strings*, in: Proc. of the 21st International Workshop on Combinatoria Algorithms (**IWOCA 2010**), Lecture Notes in Computer Science, Vol. 6460, pp. 349-362, 2011.

103. P. Burcsi, F. Cicalese, G. Fici, Zs. Lipták, *On Table Arrangements, Scrabble Freaks, and Jumbled Pattern Matching*, in: Proc. of the Fifth International Conference on Fun with Algorithms (**FUN 2010**), Lecture Notes in Computer Science, Vol. 6099, pp. 89-101, 2010.

104. F. Cicalese, T. Gagie, A.J. Macula, M. Milanič, E. Triesch, *A Better Bouncer's Algorithm*, in: Proc. of the Fifth International Conference on Fun with Algorithms (**FUN 2010**), Lecture Notes in Computer Science, Vol. 6099, pp. 113-120, 2010.

105. F. Cicalese, G. Fici, Zs. Lipták, *Searching for Jumbled Patterns in Strings*, in: Proc. of the Prague Stringology Conference 2009 (**PSC 2009**), pp. 105-117, 2009.

106. F. Cicalese, M. Milanič, *Computing with Priced Information: When the Value Makes the Price*, in: Proc. of the 19th International Symposium on Algorithms and Computation (**ISAAC 2008**), Lecture Notes in Computer Science, Vol. 5369, pp. 378-389, 2008.

107. F. Cicalese, E. Laber, *Function Evaluation via Linear Programming in the Priced Information Model*, in: Proc. of the 35th International Colloquium on Automata, Languages and Programming (**ICALP 2008**), Lecture Notes in Computer Science, Vol. 5125, pp. 173-185, 2008.

108. W. Balzano, F. Cicalese, M.R. Del Sorbo, U. Vaccaro, *Analysis and comparison of information-based distances for genomic strings*, in: Proc. of **BIOCOMP 2007**, American Institute of Phisics Proceedings Series, Vol. 1028, pp. 292-310, 2008.

109. F. Cicalese, J. Quitzau, *2-Stage Fault Tolerant Interval Group Testing*, in: Proc. of the 18th International Symposium on Algorithms and Computation (**ISAAC 2007**), Lecture Notes in Computer Science, Vol. 4835, pp. 858-868, 2007.

110. F. Cicalese, L. Gargano, U. Vaccaro, *Tunstall Parse Trees Optimum under Various Criteria*, in: Proc. of 2007 International Symposium in Information Theory (**ISIT 2007**), IEEE Press, pp. 81-85, 2007.

111. F. Cicalese, E. Laber, *On the Competitive Ratio of Evaluating Priced Functions*, in: Proc. of the 17th ACM-SIAM Symposium on Discrete Algorithms (**SODA 2006**), pp. 944-953, ACM Press, 2006.

112. F. Cicalese, F. Manne, Q. Xin, *Faster Centralized Communication in Radio Networks*, in:Proc. of the 17th International Symposium on Algorithms and Computation (**ISAAC 2006**), Lecture Notes in Computer Science, Vol. 4288, pp. 339-348, 2006.

113. F. Cicalese, E. Laber, *An Optimal Algorithm for Querying Priced Information: Monotone Boolean Functions and Game Trees*, in: Proc. of the 13th Annual European Symposium on Algorithms (**ESA 2005**), Lecture Notes in Computer Science, Vol. 3669, pp. 664-676, 2005.

114. F. Cicalese, E. Laber, *A New Strategy for Querying Priced Information*, in: Proc. of the 37th ACM Symposium on Theory of Computing (**STOC 2005**), ACM-Press, pp. 674-683, 2005.

115. F. Cicalese, P. Damaschke, L. Tansini, S. Werth, *Overlaps Help: Improved Bounds for Group Testing with Interval Queries*, in: Proc. of the 11th Annual International Computing and Combinatorics Conference (**COCOON 2005**), Lecture Notes in Computer Science, Vol. 3595, pp. 935-944, 2005.

116. F. Cicalese, P. Damaschke, U. Vaccaro, *Optimal Group Testing Algorithms with Interval Queries and Their Application to Splice Site Detection*, in: Proc. of the International Workshop on Bioinformatics Research and Applications (**IWBRA 2005**), Lecture Notes in Computer Science, Vol. 3515, pp. 1029-1037, 2005.

117. F. Cicalese, D. Mundici, *Recent developments of feedback coding, and its relations with many-valued logic*, in: Proc. of the 1st Indian Conference on Logic and its Relationship with Other Disciplines, appeared as **Logic at the Crossroads - An Interdisciplinary View**, vol I, A. Gupta, R. Parikh, J. van Benthem (Eds.), Allied Publishers, pp. 222-240, 2007.

118. F. Cicalese, C. Deppe, D. Mundici, *Q-ary Ulam-Rényi game with weighted constrained lies*, in: Proc. of the 10th Annual International Computing and Combinatorics Conference (**COCOON 2004**), Chwa, Kyung-Yong, Munro (Eds.), Lecture Notes in Computer Science, Vol. 3106, pp. 82-91, 2004.

119. F. Cicalese, C. Deppe, *Quasi-Perfect Minimally Adaptive q-ary Search with Unreliable Tests*, in: Proc. of the 14th International Symposium on Algorithms and Computation (**ISAAC 2003**), T. Ibaraki, N. Katoh, H. Ono (Eds.), Lecture Notes in Computer Science, Vol. 2906, pp. 527-536, 2003.

120. F. Cicalese, U. Vaccaro, *Bounding the Average Length of Optimal Source Codes*, in: Proc. of International Symposium in Information Theory (**ISIT 2002**), IEEE Press, p. 177, 2002.

121. F. Cicalese, L. Gargano, U. Vaccaro, *On Searching Strategies, Parallel Questions, and Delayed Answers*, in: Proc. of Fun with Algorithms (**FUN 2001**), E. Lodi, L. Pagli and N. Santoro (Eds.), Carleton Scientific Press, pp. 27–42, 2001.

122. F. Cicalese, U. Vaccaro, *The Entropy is Supermodular on the Majorization Lattice*, in: Proc. of 2001 International Symposium in Information Theory (**ISIT 2001**), IEEE Press, p. 230, 2001.

123. F. Cicalese, U. Vaccaro, *Coping with Delays and Time-Outs in Binary Search Procedures*, in: Eleventh Annual International Symposium on Algorithms and Computation (**ISAAC 2000**) D. T. Lee and Shang-Hua Teng (Eds.), Lectures Notes in Computer Science, Vol. 1969, pp. 96-107, 2000.

124. F. Cicalese, L. Gargano, U. Vaccaro, *Optimal Approximation of Uniform Distribution with a Biased Coin*, in: Proc. of $4^t h$ International Workshop of Randomization and Approximation Technique in Computer Science (**RANDOM 2000**), Carleton Scientific Press, pp. 23-37, 2000.

125. F. Cicalese, D. Mundici, *Optimal coding with one asymmetric error: below the Sphere Packing bound*, in: Proc. of 6th Annual International Computing and Combinatorics Conference (**COCOON 2000**), Lecture Notes in Computer Science, Vol. 1858, pp. 159-168, 2000.

126. F. Cicalese, D. Mundici, U. Vaccaro, *Least Adaptive Optimal Search with Unreliable Tests*, in: Proc. of 7th Scandinavian Workshop on Algorithm Theory (**SWAT 2000**), Lecture Notes in Computer Science, Vol. 1851, pp. 549-562, 2000.

127. F. Cicalese, D. Mundici, U. Vaccaro, *Perfect, Minimally Adaptive, Error-Correcting Searching Strategies*, in: Proc. of IEEE International Symposium in Information Theory (**ISIT 2000**), IEEE Press, p. 377, 2000.

128. F. Cicalese, D. Mundici, *Optimal binary search with two unreliable tests and minimum adaptiveness*, in: Proc. of 7th Annual European Symposium on Algorithms (**ESA 1999**), Lecture Notes in Computer Science, Vol. 1643, pp. 257–266, 1999.

129. F. Cicalese, A. Di Nola, V. Loia, *Fuzzy Evolutionary Framework for Adaptive Agents*, in: Proc. of the 1999 ACM Symposium on Applied Computing (**ACM-SAC 1999**), ACM Press, pp. 233-237, 1999.

130. F. Cicalese, *Q-ary Searching with Lies*, in: Proc. of 6th Italian Conference on Theoretical Computer Science (**ICTCS'98**), P. Degano, U. Vaccaro, G. Pirillo (Eds.), Scientific World, pp. 228-240, 1998.

131. F. Cicalese, V. Loia, *Can Actors learn by evolving models of fuzzy reasoning?*, in: in Proc. of **JFLA'98**, S. Cerri and C. Queinnec (Eds.), INRIA, pp. 215-226, 1998

132. F. Cicalese, A. Dattolo, V. Loia, *Actor-Based Paradigm for Fuzzy Adaptive Hypermedia*, in: Proc. of the Intl. Workshop 'Advances in Languages for User Modeling' (**UM'97**), pp.63-72, 1997.

133. F. Cicalese, A. Gisolfi, V. Loia, *A Distributed, Concurrent Architecture for Fuzzy Evolutionary Models*, in: Proc. of European Symposium on Intelligent Techniques, pp.261-264, 1997.

134. F. Cicalese, V. Loia, *Qualitative Classification by combining Genetic Algorithms and Fuzzy Logic*, in: Proc. of the Workshop Italiano su Logica Fuzzy (**WILF'97**), pp. 1-5, 1997.

135. F. Cicalese, A. Gisolfi, V. Loia, *Implementing a Fuzzy Classifier in GIS*, in: Proc. of II Intern. ICSC Symposium on Fuzzy Logic and Application (**ISFL'97**) – ICSC, pp. 327-332, 1997.

Tesi di Dottorato

F. Cicalese, *Reliable Computation with Unreliable Information*, January 2001.
Available online at: `http://www.dia.unisa.it/∼cicalese/thesis.html`.

Verona, September 11, 2024   **Ferdinando Cicalese**

Dichiarazione Sostitutiva di Certificazione
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Dichiara

che tutti i fatti e gli stati indicati nel curriculum sono da ritenersi dichiarati ai sensi e per gli effetti degli artt. 46 e/o 47 del D.P.R. 445/2000, con consapevolezza delle sanzioni penali nel caso di dichiarazioni non veritiere e falsità negli atti, richiamate dall'art. 76 del DPR 445/2000.

Verona, September 11, 2024   **Ferdinando Cicalese**