

CURRICULUM VITAE OF SIMONE FARO

June 2020

Personal Data

CONTACTS	Dipartimento di Matematica e Informatica Università degli Studi di Catania Viale A.Doria n.6 95125 Catania, Italia	<i>Office:</i> +39-095-738-3053 <i>E-mail:</i> simone.faro@unict.it <i>Web:</i> www.dmi.unict.it/~faro
EDUCATION	Ph.D. in Computer Science University of Catania	April 2005
	Master Degree in Computer Science University of Catania	October 2001
MAIN ACADEMIC POSITIONS	Associate Professor Facoltà di Scienze Matematiche, Fisiche e Naturali Department of Mathematics and Computer Science, University of Catania S.S.D. INF/01 - Computer Science	Since November 2015
	Committee Member of the Ph.D School Committee Member of the Ph.D School in Computer Science from XXIII to XXV cycle and from XXXII to XXXVI cycle, Università degli Studi di Catania.	Since October 2005
	Assistant Professor Facoltà di Scienze Matematiche, Fisiche e Naturali Department of Mathematics and Computer Science, University of Catania S.S.D. INF/01 - Computer Science	October 2006 - October 2015
	Responsible of Laboratory Responsible of the computer laboratory and multimedia services at I.P.P.A.R.I. (Centro Interdisc. Per Problemi ed Applicazioni della Ricerca Informatica) University of Catania.	September 2004 - October 2009
	Post-Doc Position Dipartimento di Matematica ed Informatica, Università degli Studi di Catania Topic: Pattern Matching Algorithms	January 2006 - October 2006
ASSOCIATIONS AND GROUPS	G.N.C.S. Gruppo Nazionale per il Calcolo Scientifico. GR.IN. GRuppo di INformatica. P.S.C. Prague Stringology Club.	

Scientific and Research Activity

RESEARCH INTERESTS	Text and strings processing algorithms, information retrieval algorithms, combinatorial algorithms, automata theory, simulation of non-deterministic finite automata, exact and approximate pattern matching, multiple string matching, data compression, text processing on compressed data, text indexing, algorithms on graphs and networks, algorithms on strings, privacy preserving text processing.
RESEARCH PROJECTS	<ul style="list-style-type: none">• co-Principal Investigator of the biennial Project <i>String Matching Efficiente su Linguaggi Naturali</i>, Funded by University of Catania, 2020.• Principal Investigator of the Project <i>String Matching Efficiente su Linguaggi Naturali</i>, Funded by Gruppo Nazionale per il Calcolo Scientifico, 2016.• Component of the FIR project <i>COMPACT: Computazione affidabile su testi firmati</i>, finanziato dall'Università di Catania, anno 2015. Funded by University of Catania, 2015.• Principal Investigator of the Project <i>Automi Reattivi e Loro Simulazione nell'Ambito del Non-Standard (Secure) Text Processing</i>, Funded by Gruppo Nazionale per il Calcolo Scientifico, 2014.• Principal Investigator of the Project <i>Strumenti Algoritmici e Crittografici per l'Elaborazione, il Mantenimento e la Trasmissione di Dati su Server Remoti</i>, Funded by Gruppo Nazionale per il Calcolo Scientifico, 2012.• Principal Investigator of the Project <i>Protocolli Efficienti per il Two-Party Secure Text-Processing</i>, Funded by Gruppo Nazionale per il Calcolo Scientifico, 2011.• Principal Investigator of the Project <i>SMART: a String Matching Algorithms Research Tool</i>, In collaboration with Prof. Thierry Lecroq, Università di Rouen. web: http://www.dmi.unict.it/faro/smart/
PROGRAM COMMITTEE	<p>Member of the Program Committee of SPIRE 2020, 27th International Symposium on String Processing and Information Retrieval, Orlando, FL, USA, October 13-15, 2020.</p> <p>Chair of the Program Committee of SEA 2020, 18th Symposium on Experimental Algorithms, Catania, Italy, June 16-18, 2020</p> <p>Member of the Program Committee of ICTCS 2019, 20th Italian Conference on Theoretical Computer Science, Como, Italy, September 9-11, 2019</p> <p>Member of the Program Committee of SPIRE 2016, 23th International Symposium on String Processing and Information Retrieval, Beppu, Japan, October 18-20, 2016.</p> <p>8 TIMES Member of the Program Committee of PSC, the Annual Prague Stringology Conference, from 2013 to 2020, Prague, Czech Republic.</p> <p>Member of the Program Committee of CPM 2012, the 23rd Annual Symposium on Combinatorial Pattern Matching, Helsinki, Finland, July 3-5, 2012.</p>

- VISITING Medipol University October 2014 - January 2015
Istanbul Medipol University, Istanbul, Turkey, for scientific collaboration with Prof. Oguzhan Kulekci.
- TÜBITAK-BILGEM-UEKAE June - July 2013
Informatics and Information Security Research Center, Istanbul, Turkey, for scientific collaboration with Prof. Oguzhan Kulekci.
- University of Rouen January 2012
Département d'Informatique et LITIS EA 4108, UFR des Sciences et des Techniques, Université de Rouen, 76821 MONT-SAINT-AIGNAN Cedex, for scientific collaboration with Prof. Thierry Lecroq.
- University of Rouen September - October 2007
Département d'Informatique et LITIS EA 4108, UFR des Sciences et des Techniques, Université de Rouen, 76821 MONT-SAINT-AIGNAN Cedex, for scientific collaboration with Prof. Thierry Lecroq.
- INTERNATIONAL PH.D. SCHOOLS
- Lipari 2002: International Computer Science School on *Ingegneria del Software*. June 30 - July 13 2002, Lipari, Italia
 - Lipari 2003. International Computer Science School on *Algorithmics for Data Mining and Pattern Discovery*. July 14-25 2003, Lipari, Italia
- SPEAKER AT INTERNAZIONALE PH.D. SCHOOL
- Speaker at the following Ph.D School in Computer Science:
- *Online Pattern Matching: Summer School of Selected Topics in Massive Data Management* TÜBITAK-BILGEM-UEKAE, Mathematical and Computational Sciences Division 1-4 July, 2013
- INVITED TALKS
- *Prague Stringology Conference 2011*. 29 August. - 1 September. 2011, Prague, Czech Republic.
2001-2010: Ten Years of Exact String Matching Algorithms.
- SEMINARS
- *Searching for Similarities by Using Bit-Parallelism*, talk given at TÜBITAK-BILGEM-UEKAE, Informatics and Information Security Research Center, Istanbul, Turkey. June 2013
 - *A Space Efficient Bit-Parallel Algorithm for the Multiple String Matching Problem*, talk given at l'Università di Rouen. September 2007
- INTERNATIONAL CONFERENCES AS SPEAKER
- *Second International Workshop on Experimental and Efficient Algorithms (WEA'03)*. 26-28 May 2003, Monte Verità , Ascona , Switzerland.
 - *Third AMAST Workshop on Algebraic Methods in Language Processing (AMILP'03)*. 25-27 August 2003, Verona, Italia
 - *Prague Stringology Conference 2003*. 22-24 September 2003, Prague, Czech Republic.
 - *Third International Conference on FUN with Algorithms (FUN'04)*. 26-28 May 2004, Isola DELba, Livorno, Italia.
 - *Workshop on Graph and Combinatorial Optimization (CTW'04)*. 31 May - 2 June 2004, Menaggio, Italia
 - *Prague Stringology Conference 2004*. 30 August. - 1 September. 2004, Prague, Czech Republic.
 - *Prague Stringology Conference 2005*. 29-31 August 2005, Prague, Czech Republic.
 - *Prague Stringology Conference 2008*. 1-3 September 2008, Prague, Czech Republic.

- *35th International Conference on Current Trends in Theory and Practice of Computer Science (SOFSEM'09)*. 24-30 January 2009, Spindleruv Mlyn, Czech Republic
- *20th International Workshop on Combinatorial Algorithms (IWOCA'09)*. 28 June - 2 July 2009, Opava, Czech Republic
- *Prague Stringology Conference 2009*. 31 august. - 2 September. 2009, Prague, Czech Republic.
- *London Stringology Days & London Algorithmic Workshop 2010 (LSD/LAW'10)*. 4-5 February 2010, King's College London, UK
- *Fifth International Conference on Fun With Algorithms (FUN'10)*. 2 - 4 June 2010, Isola di Ischia, Italy
- *Prague Stringology Conference 2010*. 30 August. - 1 September. 2010, Prague, Czech Republic.
- *London Stringology Days & London Algorithmic Workshop 2011 (LSD/LAW'11)*. 7-8 February 2011, King's College London, UK.
- *20th International Workshop on Combinatorial Algorithms (CPM 2011)*. 28 June - 2 July 2011, Palermo, Italia
- *London Stringology Days & London Algorithmic Workshop 2012 (LSD/LAW'12)*. 9-10 February 2012, King's College London, UK.
- *17th International Conference on Implementation and Application of Automata (CIAA'12)*. 17-20 July 2012, Porto, Portugal.
- *IEEE 12th International Conference on BioInformatics and BioEngineering (BIBE'12)*. 11-13 November 2013, Larnaca, Cipro.
- *Prague Stringology Conference 2013*. 2 - 4 September 2013, Prague, Czech Republic.
- *21st International Conferences on Conceptual Structures (ICCS 2014)*. 27 - 30 July 2014, Iasi, Romania.
- *Prague Stringology Conference 2014*. 4 - 6 September 2014, Prague, Czech Republic.
- *Prague Stringology Conference 2015*. 24 - 26 August 2015, Prague, Czech Republic.
- *12th International Workshop on Natural Language Processing and Cognitive Science (NLPCS 2015)* September 22-24, 2015, Krakow, Poland.

REFeree
SERVICES

Reviewer for the following international journals and intentional conferences:

- *Information Processing Letters*, Elsevier
- *Pattern Recognition Letters*, Elsevier
- *Software: Practice and Experience*, Wiley
- *IET Software*, IET Digital Library
- *International Journal of Foundation of Computer Science*, World Scientific
- *International Journal of Machine Learning and Cybernetics*, Springer
- *Journal of Biomedical and Health Informatics*, IEEE
- *The International Conference on Combinatorial Pattern Matching*, (CPM)
- *The String Processing and Information Retrieval Symposium (SPIRE)*
- *The Prague Stringology Conference (PSC)*
- *The Latin American Symposium on Theoretical Informatics (LATIN)*
- *International Conference on Biomedical Engineering and Biotechnology (iCBEB)*
- *The International Conference on Current Trends in Theory and Practice of Computer Science (SOFSEM)*

List of Scientific Papers

- INTERNATIONAL JOURNALS
(23 PAPERS)
- Simone Faro, Francesco Pio Marino and Arianna Pavone Pavone. Efficient Online String Matching Based on Characters Distance Text Sampling. *Algorithmica*, Springer, 2020.
doi:10.1007/s00453-020-00732-4
- Domenico Cantone, Simone Faro and M. Oguzhan Klekci. The order-preserving pattern matching problem in practice. *Discrete Applied Mathematics*, Elsevier, Vol. 274: pp.11-25, 2020
doi:10.1016/j.dam.2018.10.023
- Domenico Cantone, Simone Faro and Arianna Pavone. Linear and Efficient String Matching Algorithms Based on Weak Factor Recognition. *ACM Journal of Experimental Algorithmics*, Vol. 24(1): pp. 1.8:1-1.8:20, 2019
doi:10.1145/3301295
- Simone Faro and Arianna Pavone. An Efficient Skip-Search Approach to Swap Matching. *Computer Journal*, Oxford University Press, Vol.61(9): pp. 1351-1360, 2018
doi:10.1093/comjnl/bxx123
- Dario Catalano, Mario Di Raimondo and Simone Faro: Verifiable pattern matching on outsourced texts. *Journal of Discrete Algorithms*, Elsevier, Vol.51: pp. 39-50, 2018
doi:10.1016/j.jda.2018.08.002
- Tamanna Chhabra, Simone Faro, M. Oguzhan Kulekci, Jorma Tarhio. Engineering order-preserving pattern matching with SIMD parallelism. *Software: Practice and Experience*, Vol.47 (5): pp.731-739, 2017
doi:10.1002/spe.2433
- Domenico Cantone, Simone Faro and Emanuele Giaquinta. Text Searching Allowing for Inversions and Translocations of Factors. *Discrete Applied Mathematics*, Vol.163: pp.247-257, 2014
doi:10.1016/j.dam.2013.05.016
- Domenico Cantone and Simone Faro. Fast Shortest-Paths Algorithms in the Presence of few Destinations of Negative-Weight Arcs. *Journal of Discrete Algorithms*, Vol.24: pp.12-25, 2014
doi:10.1016/j.jda.2013.03.005
- Simone Faro and Oguzhan Kulekci. Fast and Flexible Packed String Matching. *Journal of Discrete Algorithms*, Vol.28: pp.61-72, 2014
doi:10.1016/j.jda.2014.07.003
- Domenico Cantone and Simone Faro. Improved and Self-Tuned Occurrence Heuristics *Journal of Discrete Algorithms*, Vol.28: pp.73-84, 2014
doi:10.1016/j.jda.2014.07.006
- Domenico Cantone, Salvatore Cristofaro and Simone Faro. Efficient String-Matching Allowing for Non-Overlapping Inversions. *Theoretical Computer Science*, Volume 483, pp. 85-95, 2013
doi:10.1016/j.tcs.2012.06.009
- Simone Faro and Thierry Lecroq,. The Exact Online String Matching Problem: a Review of the Most Recent Results. *ACM Computing Surveys*. Vol. 45(2), p.13, 2013
doi:10.1145/2431211.2431212

Domenico Cantone, Simone Faro and Emanuele Giaquinta. A Compact Representation of Nondeterministic (Suffix) Automata for the Bit-Parallel Approach. *Information and Computation*, Volume 213, pp. 3-12, 2012.
doi:10.1016/j.ic.2011.03.006

Domenico Cantone, Simone Faro and Emanuele Giaquinta. On the bit-parallel simulation of the nondeterministic Aho-Corasick and suffix automata for a set of patterns. *Journal of Discrete Algorithms*, Volume 11, pp. 25-36, 2012.
doi:10.1016/j.jda.2011.02.001

Domenico Cantone, Simone Faro and Emanuele Giaquinta. Adapting Boyer-Moore-Like Algorithms for Searching Huffman Encoded Texts. *International Journal of Foundation of Computer Science*, Volume 23(2), pp. 343-356, 2012.
doi:10.1142/S0129054112400163

Matteo Campanelli, Domenico Cantone, Simone Faro and Emanuele Giaquinta. Pattern Matching with Swaps in Practice. *International Journal of Foundation of Computer Science*, Volume 23(2), pp. 323-342, 2012.
doi:10.1142/S0129054112400163

Szymon Grabowski, Simone Faro and Emanuele Giaquinta. String Matching with Inversions and Translocations in Linear Average Time (Most of the Time). *Information Processing Letters*, Volume 111 Issue 11, May 2011.
doi:10.1016/j.ipl.2011.02.015

Domenico Cantone, Salvatore Cristofaro and Simone Faro. New Efficient Bit-Parallel Algorithms for the (δ, α) -Matching Problem with Applications in Music Information Retrieval. *International Journal of Foundation of Computer Science*, Vol. 20(6): pp. 1087-1108, 2009.
doi:10.1142/S0129054109007054

Simone Faro and Thierry Lecroq. Efficient Variants of the Backward-Oracle-Matching Algorithm. *International Journal of Foundation of Computer Science*, Vol 20(6): pp. 967-984, 2009.
doi:10.1142/S0129054109006991

Domenico Cantone, Salvatore Cristofaro and Simone Faro. On Some Combinatorial Problems Concerning the Harmonic Structure of Musical Chord Sequences. *International Journal of Foundation of Computer Science*, Vol. 19(1): pp. 103-124, 2008.
doi:10.1142/S0129054108005565

Domenico Cantone and Simone Faro. A Space Efficient Bit-parallel Algorithm for the Multiple String Matching Problem. *International Journal of Foundation of Computer Science*, Vol. 17(6): pp. 1235-1252, 2006.
doi:10.1142/S0129054106004388

Domenico Cantone and Simone Faro. Fast-Search Algorithms: New Efficient Variants of the Boyer-Moore Pattern-Matching Algorithm. *Journal of Automata, Languages and Combinatorics*, Vol. 10(5/6): pp. 589-608, 2005.

Domenico Cantone and Simone Faro. Two Levels Greedy: an improvement of the Dijkstra shortest path algorithm. *Electronic Notes in Discrete Mathematics*, Volume 17, pp.81-86, 2004.
doi:10.1016/j.endm.2004.03.019

Domenico Cantone, Simone Faro, Stefano Scafiti. Bit-Layers Text Encoding for Efficient Text Processing. *Proceedings of the SOFSEM 2020 Doctoral Student Research Forum co-located with the 46th International Conference on Current Trends in Theory and Practice of Computer Science (SOFSEM 2020)*, CEUR Workshop Proceedings, Vol.2568, pp. 13-24, 2020.

Simone Faro, Francesco Pio Marino, Stefano Scafiti. Fast-Insertion-Sort: a New Family of Efficient Variants of the Insertion-Sort Algorithm. *Proceedings of the SOFSEM 2020 Doctoral Student Research Forum co-located with the 46th International Conference on Current Trends in Theory and Practice of Computer Science (SOFSEM 2020)*, CEUR Workshop Proceedings, Vol.2568, pp. 37-48, 2020.

Geonmo Gu, Siwoo Song, Simone Faro, Thierry Lecroq, Kunsoo Park. Fast Multiple Pattern Cartesian Tree Matching. *Proceedings of WALCOM: Algorithms and Computation - 14th International Conference, WALCOM 2020*, LNCS Vol.12049, pp. 107-119, 2020. doi:10.1007/978-3-030-39881-1_10

Simone Faro and Arianna Pavone. Alignment of Sequences Allowing for Non-overlapping Unbalanced Translocations of Adjacent Factors. *Proceedings of Bioinformatics and Biomedical Engineering - 7th International Work-Conference, IWBBIO 2019*, LNCS Vol.11465, pp. 120-131, 2019. doi:10.1007/978-3-030-17938-0_12

Simone Faro and Arianna Pavone. Flexible and Efficient Algorithms for Abelian Matching in Genome Sequence. *Proceedings of Bioinformatics and Biomedical Engineering - 7th International Work-Conference, IWBBIO 2019*, LNCS Vol.11465, pp. 307-318, 2019. doi:10.1007/978-3-030-17938-0_12

Siwoo Song, Cheol Ryu, Simone Faro, Thierry Lecroq and Kunsoo Park. Fast Cartesian Tree Matching. *Proceedings of String Processing and Information Retrieval - 26th International Symposium, SPIRE 2019*, pp. 124-137, 2019. doi:10.1007/978-3-030-32686-9_9

Domenico Cantone, Simone Faro, Arianna Pavone. Speeding Up String Matching by Weak Factor Recognition. *Proceedings of the Prague Stringology Conference 2017, PSC 2017*: pp. 42-50, 2017

Simone Faro. A Very Fast String Matching Algorithm Based on Condensed Alphabets. *Proceedings of the 11th International Conference on Algorithmic Aspects in Information and Management, (AAIM 2016)*. Lecture Notes in Computer Science Vol.9778, pp. 65-76, 2016. doi:10.1007/978-3-319-41168-2

Simone Faro and M. Oguzhan Kulekci. Efficient Algorithms for the Order Preserving Pattern Matching Problem. *Proceedings of the 11th International Conference on Algorithmic Aspects in Information and Management, (AAIM 2016)*. Lecture Notes in Computer Science Vol.9778, pp. 185-196, 2016. doi:10.1007/978-3-319-41168-2

Simone Faro. Evaluation and Improvement of Fast Algorithms for Exact Matching on Genome Sequences. *Proceedings of the Third International Conference on Algorithms for Computational Biology (AlCoB 2016)*. Lecture Notes in Computer Science Vol.9702, pp. 145-157, 2016. doi:10.1007/978-3-319-38827-4

Dario Catalano, Mario Di Raimondo, Simone Faro. Verifiable Pattern Matching on Outsourced Texts. *Proceedings of the 10th International Conference on Security and Cryptography for Networks (SCN 2016)*. Lecture Notes in Computer Science Vol.9841,

pp. 333-350, 2016.
doi:10.1007/978-3-319-44618-9

Simone Faro, Thierry Lecroq, Stefano Borzi, Simone Di Mauro, Alessandro Maggio. The String Matching Algorithms Research Tool. *Proceedings of the Prague Stringology Conference 2016, PSC 2016*, pp.99-111, isbn:978-80-01-05996-8, 2016

B.Adas, E.Bayraktar, S.Faro, I.E.Moustafa and M.O.Kulekci. Short Read Alignment and Compression via Shortest Unique Substring Identifiers. *Proceedings of the 3rd International Work-Conference on Bioinformatics and Biomedical Engineering (IWBBIO 2015)*, Lecture Notes in Computer Science Vol.9044, pp. 363–374, 2015.
doi:10.1007/978-3-319-16480-9_36

Domenico Cantone, Simone Faro, M. Oguzhan Kulekci. An Efficient Skip-Search Approach to the Order-Preserving Pattern Matching Problem. *Proceedings of the Prague Stringology Conference 2015, PSC 2015*, pp.22-35, isbn:978-80-01-05787-2, 2015

Simone Faro, Arianna Pavone. Refined Tagging of Complex Verbal Phrases for the Italian Language. *Proceedings of the Prague Stringology Conference 2015, PSC 2015*, pp.132-145, isbn:978-80-01-05787-2, 2015

Valeria Borz, Simone Faro and Arianna Pavone. Automatic Extraction of Semantic Relations by Using Web Statistical Information. *Proceedings of the International Conference on Conceptual Structures 2014 (ICCS 2014)*, Lecture Notes in Computer Science Vol.8577, pp.174-187, 2014.
doi:10.1007/978-3-319-08389-6_15

Simone Faro and Domenico Cantone Efficient Online Abelian Pattern Matching in Strings by Simulating Reactive Multi-Automata *Proceedings of the Prague Stringology Conference 2014, PSC 2013*, pp.30-42, isbn:978-80-01-05547-2, 2014

Simone Faro. Swap Matching in Strings by Simulating Reactive Automata. *Proceedings of the Prague Stringology Conference 2013, PSC 2013*, pp. 7-20. isbn:978-80-01-05330-0, 2013

Domenico Cantone, Simone Faro. Improved and Self-Tuned Occurrence Heuristics. *Proceedings of the Prague Stringology Conference 2013, PSC 2013*, pp. 92-106. isbn:978-80-01-05330-0, 2013

Simone Faro, Oguzhan Kulekci. Towards a Very Fast Multiple String Matching Algorithm for Short Patterns *Proceedings of the Prague Stringology Conference 2013, PSC 2013*, pp. 78-91. isbn:978-80-01-05330-0, 2013

Simone Faro, Oguzhan Kulekci. Fast Packed String Matching for Short Patterns. *Proceedings of the 15th Meeting on Algorithm Engineering and Experiments, ALENEX 2013*, SIAM, pp. 113-121, 2013.

Simone Faro, Thierry Lecroq. Fast Searching in Biological Sequences Using Multiple Hash Functions. *Proceedings of 12th IEEE International Conference on Bioinformatics and BioEngineering, BIBE 2012*, IEEE Computer Society, pp. 175-180, 2012.
doi:10.1109/BIBE.2012.6399669

Simone Faro, Oguzhan Kulekci. Fast Multiple String Matching Using Streaming SIMD Extensions Technology. *Proceedings of 19th International Symposium on String Processing and Information Retrieval, SPIRE 2012*, Lecture Notes in Computer Science, Vol.7608, pp.217-228, isbn:978-3-642-34108-3, 2012.
doi:10.1007/978-3-642-34109-0

Simone Faro, Thierry Lecroq. A Fast Suffix Automata Based Algorithm for Exact Online String Matching. *Proceedings of 17th International Conference on Implementation and Application of Automata, CIAA 212*, Lecture Notes in Computer Science, Vol.7381/2012, pp.149-158, isbn:978-3-642-31605-0, 2012.
doi:10.1007/978-3-642-31606-7

Simone Faro, Thierry Lecroq. A Multiple Sliding Windows Approach to Speed Up String Matching Algorithms. *Proceedings of 11th International Symposium on Experimental Algorithms, SEA 2012*, Lecture Notes in Computer Science, Vol.7276/2012, pp.172-183, isbn:978-3-642-30849-9, 2012.
doi:10.1007/978-3-642-30850-5

Simone Faro and Thierry Lecroq. 2001-2010: Ten Years of Exact String Matching Algorithms. *Proceedings of the Algorithmique, combinatoire du texte et applications en bio-informatique, SeqBio 2011*, invited talk, 2011

Simone Faro and Thierry Lecroq. 2001-2010: Ten Years of Exact String Matching Algorithms. *Proceedings of the Prague Stringology Conference 2011, PSC 2011*, invited talk, pp. 1-2. isbn:978-80-01-04870-2, 2011

Domenico Cantone, Salvatore Cristofaro and Simone Faro. Efficient Matching of Biological Sequences Allowing for Non-Overlapping Inversions. *In Proceedings of the 22nd Annual Symposium on Combinatorial Pattern Matching, CPM 2011*, Lecture Notes in Computer Science, Vol. 6661/2011, pp. 364-375, isbn:978-3-642-21457-8, 2011.
doi:10.1007/978-3-642-21458-5

Domenico Cantone, Simone Faro and Emanuele Giaquinta. Approximate String Matching Allowing for Inversions and Translocations *In Proceedings of the Prague Stringology Conference 2010, PSC 2010*, pp. 37-51, isbn:978-80-01-04597-8, 2010.

Domenico Cantone and Simone Faro. A Space-Efficient Implementation of the Good-Suffix Heuristic. *In Proceedings of the Prague Stringology Conference 2010, PSC 2010*, pp. 63-75, isbn:978-80-01-04597-8, 2010.

Domenico Cantone, Simone Faro and Emanuele Giaquinta. A Compact Representation of Nondeterministic (Suffix) Automata for the Bit-Parallel Approach *In Proceedings of the 21st Annual Symposium on Combinatorial Pattern Matching, CPM 2010*, Lecture Notes in Computer Science, Vol.6129/2010, pp.288-298, isbn:978-3-642-13508-8, 2010.
doi:10.1007/978-3-642-13509-5_26

Domenico Cantone, Simone Faro and Emanuele Giaquinta. Bit-(Parallelism)²: Getting to the Next Level of Parallelism. *In Proc. of the Fifth International Conference on Fun With Algorithms, FUN 2010*, Lecture Notes in Computer Science, Vol. 6099/2010, pp.166-177, isbn:978-3-642-13121-9, 2010.
doi:10.1007/978-3-642-13122-6_18

Simone Faro and Elisa Pappalardo. Ant-CSP: an Ant Colony Optimization Algorithm for the Closest String Problem. *In Proc. of the 36th International Conference on Current Trends in Theory and Practice of Computer Science, SOFSEM 2010*, Lecture Notes in Computer Science, Vol.5901, pp.370-381, isbn:978-3-642-11265-2, 2010.
doi:10.1007/978-3-642-11266-9_31

Domenico Cantone and Simone Faro. Pattern Matching with Swaps for Short Patterns in Linear Time. *In Proceedings of the 35th International Conference on Current Trends in Theory and Practice of Computer Science, SOFSEM 2009*. Lecture Notes In Computer Science, Vol. 5404, pp.255-266, isbn: 978-3-540-95890-1, 2009.
doi:10.1007/978-3-540-95891-8_25

Simone Faro and Thierry Lecroq. An efficient matching algorithm for encoded DNA sequences and binary strings. In *Proceedings of the 20th Annual Symposium on Combinatorial Pattern Matching (CPM 2009)*. Lecture Notes In Computer Science, Vol. 5577, pp.106-115, isbn:978-3-642-02440-5, 2009.
doi:10.1007/978-3-642-02441-2_10

Matteo Campanelli, Domenico Cantone and Simone Faro. A New Algorithm for Efficient Pattern Matching with Swaps. In *Proceedings of the 20th International Workshop on Combinatorial Algorithms, IWOCA 2009*. Lecture Notes In Computer Science, Vol. 5874, pp.230-241, isbn:978-3-642-10216-5, 2009.
doi:10.1007/978-3-642-10217-2_24

Matteo Campanelli, Domenico Cantone, Simone Faro and Emanuele Giaquinta. An Efficient Algorithm for Approximate Pattern Matching with Swaps. In *Proceedings of the 14th Prague Stringology Conference, PSC 2009*, pp. 90-104
isbn:978-80-01-04403-2, 2009.

Domenico Cantone, Simone Faro and Emanuele Giaquinta. Adapting Boyer-Moore-Like Algorithms for Searching Huffman Encoded Texts. In *Proceedings of the 14th Prague Stringology Conference, PSC 2009*, pp. 29-39, isbn:978-80-01-04403-2, 2009.

Simone Faro and Thierry Lecroq. Efficient Variants of the Backward-Oracle-Matching Algorithm. In *Proceedings of the 13th Prague Stringology Conference, PSC 2008*, pp. 146-160, isbn:978-80-01-04145-1, 2008.

Domenico Cantone, Salvatore Cristofaro and Simone Faro. New Efficient Bit-Parallel Algorithms for the Delta-Matching Problem with Alpha-Bounded Gaps. In *Proceedings of the 13th Prague Stringology Conference, PSC 2008*, pp. 170-184
isbn:978-80-01-04145-1, 2008.

Domenico Cantone, Salvatore Cristofaro, Simone Faro and Emanuele Giaquinta. Finite State Models for the Generation of Large Corpora of Natural Language Texts. In *Proceedings of the Seventh International Workshop on Finite-State Methods and Natural Language Processing, FSMNLP 2008*, isbn:978-1-58603-975-2, 2008.
doi:10.3233/978-1-58603-975-2-175

Domenico Cantone and Simone Faro. Pattern Matching for Control Chart Monitoring. *Progress in Industrial Mathematics at ECMI 2006*, Mathematics in Industry, Springer Verlag, Vol. 12, III, pp. 918-922, isbn:978-3-540-71992-2, 2008.
doi:10.1007/978-3-540-71992-2_161

Domenico Cantone, Salvatore Cristofaro and Simone Faro. On some Combinatorial Problems concerning the Harmonic Structure of Musical Chord Sequences. In *Proc. of the 12th Prague Stringology Conference, PSC 2006*, pp. 49-64
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