

Curriculum Vitae di GUIDO PROIETTI

con elenco completo dei titoli e delle pubblicazioni

DATI BIOGRAFICI FONDAMENTALI E PRINCIPALI POSIZIONI RICOPERTE

Guido Proietti è nato a Roma il 13 giugno 1966, ed è Professore Ordinario per il settore scientifico-disciplinare INF/01-Informatica presso il Dipartimento di Ingegneria e Scienze dell'Informazione e Matematica dell'Università degli Studi dell'Aquila.

Ha prestato servizio presso l'Università degli Studi dell'Aquila dal marzo 1996 all'Ottobre 2000 in qualità di Ricercatore Universitario, e dal novembre 2000 al Dicembre 2013 in qualità di Professore Associato, sempre afferendo al settore scientifico-disciplinare INF/01-Informatica.

Dal gennaio 2000 è Associato di Ricerca presso l'Istituto di Analisi dei Sistemi ed Informatica "Antonio Ruberti" del CNR di Roma.

Dall'ottobre 2011 al novembre 2012 è stato membro del Nucleo di Valutazione di Ateneo dell'Università degli Studi dell'Aquila.

Dall'ottobre 2012 è membro del Consiglio Direttivo del Consorzio Interuniversitario Nazionale per l'Informatica (CINI).

Dal marzo 2013 al marzo 2016 è stato membro del Presidio della Qualità di Ateneo dell'Università degli Studi dell'Aquila.

Dal dicembre 2014 è Referente di Ateneo per il *Sistema di Valutazione dei Risultati della Didattica* dell'Università degli Studi dell'Aquila.

Dal novembre 2015 al maggio 2018 è stato Presidente dei Corsi di Laurea Triennale e Magistrale in Informatica dell'Università degli Studi dell'Aquila.

Dall'aprile 2017 è membro del Nucleo di Valutazione della Scuola Universitaria Superiore "Gran Sasso Science Institute", L'Aquila.

Dal maggio 2018 è Direttore del Dipartimento di Ingegneria e Scienze dell'Informazione e Matematica dell'Università degli Studi dell'Aquila.

ATTIVITÀ SCIENTIFICA

È autore o coautore di un totale di 132 pubblicazioni scientifiche internazionali nell'ambito dell'informatica: 2 Capitoli di Libro, 46 lavori in Riviste Scientifiche internazionali (24 dei quali forma estesa di versione già pubblicata su Atti di Conferenza, di cui 10 invitati per la pubblicazione su una *Special Issue* dedicata alla relativa Conferenza), e 84 lavori in Atti di Conferenze internazionali. È inoltre stato co-editore del volume *Proceedings in Informatics: 7th Colloquium on Structural Information and Communication Complexity (SIROCCO 2000)*, Carleton Scientific, e del numero speciale del *Journal of Discrete Algorithms*, Elsevier Science, dedicato alla predetta Conferenza.

È stato *Visiting Scientist* presso: (1) Institute für Theoretische Informatik, ETH Zentrum, Zurigo, Svizzera, Prof. P. Widmayer; (2) Aristotle University of Thessaloniki, Salonico, Grecia, Prof. Y.

Manolopoulos; (3) Carnegie Mellon University, Pittsburgh, PA, USA, Prof. C. Faloutsos; (4) Hong Kong University of Science and Technology, Hong Kong, Cina, Prof. D. Papadias; (5) Institute für Informatik, RWTH University of Aachen, Germania, Prof. J. Hromkovič.

Ha tenuto seminari e presentazioni in molteplici convegni scientifici nazionali ed internazionali. In particolare, nel luglio 2003, ha tenuto una presentazione invitata nella sessione “Graph Problems” del Congresso Internazionale di Ricerca Operativa EURO/INFORMS 2003, tenutosi ad Istanbul, Turchia, dal titolo “Algorithmic Mechanism Design for Graph Optimization Problems”. Inoltre, nel dicembre 2007 ha tenuto un seminario invitato presso il Department of Computer Science della Carnegie Mellon University, Pittsburgh, Pennsylvania, USA, dal titolo “Locating Facilities on a Network to Minimize their Average Service Radius”.

È stato membro dei Comitati di Programma dei seguenti Convegni Internazionali: (1) *7th Colloquium on Structural Information and Communication Complexity (SIROCCO 2000)*; (2) *10th Colloquium on Structural Information and Communication Complexity (SIROCCO'03)*; (3) *11th European Symposium on Algorithms (ESA'03)*; (4) *3rd Workshop on Approximation and Online Algorithms (WAOA'05)*; (5) *14th Colloquium on Structural Information and Communication Complexity (SIROCCO'07)*; (6) *11th International Symposium on Experimental Algorithms (SEA'12)*; *20th International Symposium on Fundamentals of Computation Theory (FCT'15)*; *6th International Conference on Data Communication Networking (DCNET'15)*; *21th International Symposium on Fundamentals of Computation Theory (FCT'17)*; *10th International Symposium on Algorithmic Game Theory (SAGT'17)*; *4th International Workshop on Algorithmic Aspects of Cloud Computing (ALGO CLOUD 2018)*.

È stato Presidente del Comitato Organizzatore dei seguenti Convegni Internazionali: (1) *7th Colloquium on Structural Information and Communication Complexity (SIROCCO 2000)*, L'Aquila, 20-22 giugno 2000; (2) *3rd Workshop on Distributed Data and Structures (WDAS 2000)*, L'Aquila, 23 giugno 2000; (3) *7th Mountain Workshop on Algorithms (MWA'03)*, Pescasseroli (AQ), 3-7 maggio 2003; (4) *9th Mountain Workshop on Algorithms (MWA'06)*, Ortisei (BZ), 10-12 giugno 2006.

È stato co-Presidente del Comitato Organizzatore del 48° Congresso Nazionale dell'Associazione Italiana per l'Informatica ed il Calcolo Automatico (AICA), L'Aquila, 29 settembre-1 ottobre 2010.

È stato Responsabile Scientifico per la sede dell'Università degli Studi dell'Aquila dei seguenti Progetti Nazionali: (1) “REsource ALlocation for WIreless NETworks (REALWINE)”, co-finanziato dal MIUR nell'ambito del PRIN 2001; (2) “Piattaforme abilitanti per griglie computazionali ad elevate prestazioni orientate ad organizzazioni virtuali scalabili (GRID-IT)”, progetto negoziale co-finanziato dal MIUR nell'ambito del FIRB 2001.

È stato Vice-Coordinatore Nazionale del progetto “COmputational and GamE-theoretic aspects of uncoordinated NeTworks (COGENT)”, co-finanziato dal MIUR nell'ambito del PRIN 2008, e coordinato dal Prof. Michele Flammini dell'Università degli Studi dell'Aquila.

ATTIVITÀ DIDATTICA

Dal settembre 1994 svolge attività didattica in corsi di natura algoritmica presso i corsi di studio in Informatica dell'Università degli Studi dell'Aquila.

È attualmente titolare presso i corsi di Laurea triennale e magistrale in Informatica dell'Università degli Studi dell'Aquila dei seguenti insegnamenti: (1) Modulo da 6 *crediti formativi universitari* (CFU) di “Algoritmi e Strutture Dati” nel corso integrato da 12 CFU di “Algoritmi e Strutture Dati con Laboratorio”; (2) Modulo da 6 CFU di “Distributed Systems” nel corso integrato da 12 CFU di “Distributed Systems and Web Algorithms”; (3) Modulo da 3 CFU di “Non-cooperative Networks” nel corso integrato da 6 CFU di “Autonomous Networks”.

È stato tutore di 6 studenti nell'ambito di scuole di Dottorato di Ricerca di area informatica presso l'Università degli Studi dell'Aquila e il Gran Sasso Science Institute di L'Aquila.

Ha svolto attività di docenza presso la Scuola Nazionale dell'Amministrazione, nell'ambito di vari corsi di avviamento al nuovo Codice dell'Amministrazione Digitale.

ELENCO COMPLETO DELLE PUBBLICAZIONI

Le pubblicazioni sono divise per tipologia di sede di pubblicazione (**V** per Volumi Editi, **L** per Capitoli di libri, **R** per Riviste Internazionali, e **C** per Atti di Conferenze Internazionali) ordinate in ordine cronologico inverso rispetto alla data di pubblicazione. I lavori presentati a Conferenza e successivamente pubblicati su Rivista appaiono una sola volta sotto quest'ultima voce.

Volumi Editi

- V2. *Journal of Discrete Algorithms*, Special issue devoted to selected papers presented at the 7th International Colloquium on Structural Information and Communication Complexity (SIROCCO 2000). Michele Flammini, Enrico Nardelli, Guido Proietti and Paul Spirakis, Editors, Elsevier Science, 2003.
- V1. *Proceedings in Informatics: Sirocco 7*, Proceedings of the 7th International Colloquium on Structural Information and Communication Complexity (SIROCCO 2000), ISBN 1-894145-06-2, Michele Flammini, Enrico Nardelli, Guido Proietti, and Paul Spirakis, Editors, Carleton Scientific, 2000.

Capitoli di Libri

- L2. L. Forlizzi and G. Proietti, La teoria degli algoritmi nella scuola secondaria di secondo grado, chapter 7 in *E questo tutti chiamano Informatica*, Sapienza Università Editrice, 2015.
- L1. A. Di Pasquale, L. Forlizzi, C. S. Jensen, Y. Manolopoulos, E. Nardelli, D. Pfoser, G. Proietti, S. Saltenis, Y. Theodoridis, T. Tzouramanis, and M. Vassilakopoulos, Access methods and query processing techniques, chapter 6 in *Spatio-Temporal Databases: The CHOROCHRONOS Approach*. Vol. 2520 of Lecture Notes in Computer Science, Springer-Verlag, 2003.

Riviste Internazionali

- R46. D. Bilò, L. Gualà, S. Leucci, and G. Proietti, Fault-Tolerant Approximate Shortest-Path Trees, *Algorithmica*, accepted for publication, 2017. A preliminary version of this paper was presented at the 22nd European Symposium on Algorithms (ESA'14), September 8-10, 2014, Wrocław, Poland. Vol. 8737 of Lecture Notes in Computer Science, Springer, 137–148, 2014.
- R45. D. Bilò, L. Gualà, S. Leucci, and G. Proietti, Exact and approximate algorithms for movement problems on (special classes of) graphs, *Theoretical Computer Science*, 652:86–101 (2016). A preliminary version of this paper was presented at the 20th Colloquium on Structural Information and Communication Complexity (SIROCCO'13), July 1-3, 2013, Ischia, Italy. Vol. 8179 of Lecture Notes in Computer Science, Springer, 322–333, 2013.
- R44. D. Bilò, L. Gualà, S. Leucci, and G. Proietti, Locality-based network creation games, *ACM Transactions on Parallel Computing*, 3(1), Article 6, (2016). Special Journal Issue on selected papers from the 26th ACM Symposium on Parallelism in Algorithms and Architectures (SPAA'14), Prague, Czech Republic, June 23-25, 2014, ACM Press, 277–286.
- R43. A. D'Andrea, M. D'Emidio, D. Frigioni, S. Leucci, and G. Proietti, Dynamic maintenance of a shortest-path tree on homogeneous batches of updates: new algorithms and experiments, *ACM Journal on Experimental Algorithmics*, 20(1), Article 5, (2015).

- R42. D. Bilò, L. Gualà, and G. Proietti, Bounded-distance network creation games, *ACM Transactions on Economics and Computation*, 3(3), Article 16, (2015). A preliminary version of this paper was presented at the *8th International Workshop on Internet & Network Economics (WINE'12)*, Liverpool, UK, December 9-12, 2012. Vol. 7695 of Lecture Notes in Computer Science, Springer, 72–85.
- R41. D. Bilò, L. Gualà, and G. Proietti, A faster computation of all the best swap edges of a shortest paths tree, *Algorithmica*, 73(3):547–570 (2015). Special Journal Issue on selected papers from the *21st European Symposium on Algorithms (ESA'13)*, Sophia Antipolis, France, September 2-4, 2013. Vol. 8125 of Lecture Notes in Computer Science, Springer, 157–168.
- R40. D. Bilò, L. Gualà, S. Leucci, and G. Proietti, The max-distance network creation game on general host graphs, *Theoretical Computer Science*, 573:43–53 (2015). A preliminary version of this paper was presented at the *8th International Workshop on Internet & Network Economics (WINE'12)*, Liverpool, UK, December 9-12, 2012. Vol. 7695 of Lecture Notes in Computer Science, Springer, 393–406.
- R39. D. Bilò, L. Gualà, S. Leucci, and G. Proietti, Specializations and generalizations of the Stackelberg minimum spanning tree game, *Theoretical Computer Science*, 562:643–657 (2015). A preliminary version of this paper was presented at the *6th International Workshop on Internet & Network Economics (WINE'10)*, Stanford, California, USA, December 13-17, 2010. Vol. 6484 of Lecture Notes in Computer Science, Springer, 75–86.
- R38. E. Bampas, D. Bilò, G. Drovandi, L. Gualà, R. Klasing, and G. Proietti, Network verification via routing table queries, *Journal of Computer and System Sciences*, 81(1):234–248 (2015). A preliminary version of this paper was presented at the *18th Colloquium on Structural Information and Communication Complexity (SIROCCO'11)*, Gdansk, Polonia, June 26-29, 2011. Vol. 6796 of Lecture Notes in Computer Science, Springer, 270–281.
- R37. D. Bilò, L. Gualà, and G. Proietti, Finding best swap edges minimizing the routing cost of a spanning tree, *Algorithmica*, 68(2):337–357 (2014). A preliminary version of this paper was presented at the *35th Int. Symposium on Mathematical Foundations of Computer Science (MFCS'10)*, Brno, Czech Republic, August 23-27, 2010. Vol. 5869 of Lecture Notes in Computer Science, Springer, 138–149.
- R36. D. Bilò, L. Gualà, and G. Proietti, Improved approximability and non-approximability results for graph diameter decreasing problems, *Theoretical Computer Science*, 417:12–22 (2012). Special Journal Issue on selected papers from the *35th Int. Symposium on Mathematical Foundations of Computer Science (MFCS'10)*, Brno, Czech Republic, August 23-27, 2010. Vol. 5869 of Lecture Notes in Computer Science, Springer, 150–161.
- R35. D. Bilò, L. Forlizzi, and G. Proietti, Approximating the metric TSP in linear time, *Theory of Computing Systems*, 49(3):615–631 (2011). A preliminary version of this paper was presented at the *34th Int. Workshop on Graph-Theoretic Concepts in Computer Science (WG'08)*, Durham University, UK, 30 June-2 July, 2008. Vol. 5344 of Lecture Notes in Computer Science, Springer-Verlag, 43–54.
- R34. D. Bilò, L. Forlizzi, L. Gualà, and G. Proietti, Approximate mechanisms for the graphical TSP and other graph traversal problems, *Internet Mathematics*, 5(4):411–435 (2010). Special Journal Issue on selected papers from the *3rd Int. Workshop on Internet & Network Economics (WINE'07)*, San Diego, CA, USA, December 12-14, 2007. A preliminary version of the paper appeared in Vol. 4858 of Lecture Notes in Computer Science, Springer-Verlag, 503–514.
- R33. D. Bilò, L. Gualà, and G. Proietti, Dynamic mechanism design, *Theoretical Computer Science*, 410(17):1564–1572 (2009). Special Journal Issue on selected papers from the *2nd Int. Workshop*

- on *Internet and Network Economics (WINE'06)*, Patras, Greece, December 15-17, 2006. A preliminary version of the paper appeared in Vol. 4286 of *Lecture Notes in Computer Science*, Springer-Verlag, 3–15.
- R32. P. Penna, G. Proietti, and P. Widmayer, Strongly polynomial-time truthful mechanisms in one shot, *Theoretical Computer Science*, 410(17):1607–1615 (2009). Special Journal Issue on selected papers from the *2nd Int. Workshop on Internet and Network Economics (WINE'06)*, Patras, Greece, December 15-17, 2006. A preliminary version of the paper appeared in Vol. 4286 of *Lecture Notes in Computer Science*, Springer-Verlag, 77–88.
- R31. H.-J. Böckenhauer, D. Bongartz, J. Hromkovic, R. Klasing, G. Proietti, S. Seibert, and W. Unger, On k -connectivity problems with sharpened triangle inequality, *Journal of Discrete Algorithms*, 6(4):605–617 (2008). A preliminary version of this paper was presented at the *5th Italian Conference on Algorithms and Complexity (CIAC'03)*, Rome, Italy, May 28-30, 2003. Vol. 2653 of *Lecture Notes in Computer Science*, Springer-Verlag, 189–200.
- R30. D. Bilò and G. Proietti, On the complexity of minimizing interference in ad-hoc and sensor networks, *Theoretical Computer Science*, 402(1):43–55 (2008). Special Journal Issue on selected papers from the *2nd Int. Workshop on Algorithmic Aspects of Wireless Sensor Networks (ALGOSENSORS'06)*, Venezia, Italy, July 15, 2006. A preliminary version of the paper appeared in Vol. 4240 of *Lecture Notes in Computer Science*, Springer-Verlag, 13–24.
- R29. L. Gualà and G. Proietti, Exact and approximate truthful mechanisms for the shortest-paths tree problem, *Algorithmica*, 49(3):171–191 (2007).
- R28. H.-J. Böckenhauer, L. Forlizzi, J. Hromkovic, J. Kneis, J. Kupke, G. Proietti, and P. Widmayer, On the approximability of TSP on local modifications of optimally solved instances, *Algorithmic Operations Research*, 2(2):83–93 (2007).
- R27. A. Di Salvo and G. Proietti, Swapping a failing edge of a shortest paths tree by minimizing the average stretch factor, *Theoretical Computer Science*, 383(1):23–33 (2007). Special Journal Issue on selected papers from the *11th Colloquium on Structural Information and Communication Complexity (SIROCCO'04)*, Smolenice Castle, Slovakia, June 21-23, 2004. A preliminary version of the paper appeared in Vol. 3104 of *Lecture Notes in Computer Science*, Springer-Verlag, 99–110.
- R26. L. Gualà and G. Proietti, Efficient truthful mechanisms for the single-source shortest paths tree problem, *Concurrency and Computation: Practice and Experience*, 19(17):2285–2297 (2007). Special Journal Issue on selected papers from the *11th Int. Euro-Par Conference (EURO-PAR'05)*, Lisboa, Portugal, August 30-September 2, 2005. A preliminary version of the paper appeared in Vol. 3648 of *Lecture Notes in Computer Science*, Springer-Verlag, 941–951.
- R25. C. Gaibisso, G. Proietti, and R. Tan, Efficient management of transient station failures in linear radio communication networks with bases, *Journal of Parallel and Distributed Computing*, 66(4):556–565 (2006). A preliminary version of this paper was presented at the *2nd Int. Workshop on Approximation and Randomized Algorithms in Communication Networks (ARAC-NE'01)*, Aarhus, Denmark, August 27th, 2001. Vol. 12 of *Proceedings in Informatics*, Carleton Scientific, 37–54.
- R24. L. Forlizzi, J. Hromkovic, G. Proietti, and S. Seibert, On the stability of approximation for Hamiltonian path problems, *Algorithmic Operations Research*, 1(1):31–45 (2006). A preliminary version of this paper was presented at the *31st Annual Conf. on Current Trends in Theory and Practice of Informatics (SOFSEM'05)*, Liptovsky Jan, Slovak Republic, January 22-28, 2005. Vol. 3381 of *Lecture Notes in Computer Science*, Springer-Verlag, 147–156.

- R23. E. Nardelli and G. Proietti, Efficient unbalanced merge-sort, *Information Sciences*, 176(10):1321–1337 (2006).
- R22. H.-J. Böckenhauer, D. Bongartz, J. Hromkovic, R. Klasing, G. Proietti, S. Seibert, and W. Unger, On the hardness of constructing minimal biconnected spanning subgraphs in complete graphs with sharpened triangle inequality, *Theoretical Computer Science*, 326(1-3):137–153 (2004). A preliminary version of this paper was presented at the *22nd Foundations of Software Technology and Theoretical Computer Science (FSTTCS'02)*, Kanpur, India, December 12-14, 2002. Vol. 2556 of Lecture Notes in Computer Science, Springer, 59–70.
- R21. E. Nardelli, G. Proietti, and P. Widmayer, Nearly linear time minimum spanning tree maintenance for transient node failures, *Algorithmica*, 40(2):119–132 (2004).
- R20. A. Galluccio and G. Proietti, Polynomial time algorithms for 2-edge-connectivity augmentation problems, *Algorithmica*, 36(4):361–374 (2003).
- R19. E. Nardelli, G. Proietti, and P. Widmayer, Swapping a failing edge of a single source shortest paths tree is good and fast, *Algorithmica*, 35(1):56–74 (2003).
- R18. E. Nardelli, G. Proietti, and P. Widmayer, Finding the most vital node of a shortest path, *Theoretical Computer Science*, 296(1):167–177 (2003). Special Journal Issue on selected papers from the *7th Annual Int. Computing and Combinatorics Conf. (COCOON'01)*, Guilin, China, August 20-23, 2001. A preliminary version of the paper appeared in Vol. 2108 of Lecture Notes in Computer Science, Springer, 278–287.
- R17. E. Nardelli, G. Proietti, and P. Widmayer, Finding all the best swaps of a minimum diameter spanning tree under transient edge failures, *Journal of Graph Algorithms and Applications*, 5(5):39–57 (2001). A preliminary version of this paper was presented at the *6th European Symp. on Algorithms (ESA'98)*, Venice, Italy, 24-26 September 1998. Vol. 1461 of Lecture Notes in Computer Science, Springer, 55–66.
- R16. M. Flammini, E. Nardelli, and G. Proietti, Efficient ATM layouts with bounded hop count and congestion, *Distributed Computing*, 14(2):65–73 (2001). A preliminary version of this paper was presented at the *8th Workshop on Distributed Algorithms (WDAG'97)*, Saarbrücken, Germany, 1997. Vol. 1320 of Lecture Notes in Computer Science, Springer, 52–65.
- R15. E. Nardelli, G. Proietti, and P. Widmayer, A faster computation of the most vital edge of a shortest path, *Information Processing Letters*, 79(2):81–85 (2001).
- R14. G. Proietti and C. Faloutsos, Accurate modeling of region data, *IEEE Transactions on Knowledge and Data Engineering*, 13(6):874–883 (2001).
- R13. Y. Manolopoulos, E. Nardelli, G. Proietti, and E. Tousidou, A generalized comparison of linear representations of thematic layers, *Data and Knowledge Engineering*, 37(1):1–23 (2001).
- R12. E. Nardelli and G. Proietti, An efficient spatial access method for spatial images containing multiple non-overlapping features, *Information Systems*, 25(8):553–558 (2000).
- R11. G. Proietti and C. Faloutsos, Analysis of range queries and self spatial join queries on real region datasets stored using an R-tree, *IEEE Transactions on Knowledge and Data Engineering*, 12(5):751–762 (2000).
- R10. G. Proietti, An optimal algorithm for decomposing a window into its maximal quadtree blocks, *Acta Informatica*, 36(4):257–266 (1999).
- R9. E. Nardelli and G. Proietti, Probabilistic models for images and quadtrees: differences and equivalences, *Image and Vision Computing*, 17:659–665 (1999).

- R8. C. Gaibisso, E. Nardelli, and G. Proietti, Intersection reporting on two collection of disjoint sets, *Information Sciences*, 114:41–52 (1999).
- R7. E. Nardelli, G. Proietti, and P. Widmayer, Finding the detour-critical edge of a shortest path between two nodes, *Information Processing Letters*, 67(1):51–54 (1998).
- R6. Y. Manolopoulos, E. Nardelli, A. Papadopoulos, and G. Proietti, MOF-tree: a spatial access method to manipulate multiple overlapping features, *Information Systems*, 22(8):465–481 (1997).
- R5. E. Nardelli and G. Proietti, Time and space efficient secondary memory representation of quadtrees, *Information Systems*, 22(1):26–37 (1997).
- R4. G. Proietti, The MOF⁺-tree: a space efficient representation of images containing multiple overlapping features, *Journal of Computing and Information*, 2:42–56 (1996).
- R3. Y. Manolopoulos, E. Nardelli, G. Proietti, and M. Vassilakopoulos, On the creation of quadtrees by using a branching process, *Image and Vision Computing*, 14:159–164 (1996).
- R2. E. Nardelli and G. Proietti, Efficient secondary memory processing of window queries on spatial data, *Information Sciences*, 84:67–83 (1995).
- R1. E. Nardelli and G. Proietti, An optimal resolution sensitive pyramid representation for hierarchical memory models, *Journal of Computing and Information*, 1:385–402 (1994).

Atti di Conferenze Internazionali

- C60. D. Bilò, L. Gualà, S. Leucci, G. Proietti, and M. Rossi, On the PSPACE-completeness of peg duotaire and other peg-jumping games, *Proceedings of the 9th International Conference on Fun with Algorithms (FUN'18)*, June 13-15, 2018, La Maddalena, Italy. Vol. 100 of LIPIcs Series, Schloss Dagstuhl, 8:1-8:15, 2018.
- C59. D. Bilò, K. Choudhary, L. Gualà, S. Leucci, M. Parter, and G. Proietti, Efficient oracles and routing schemes for replacement paths, *Proceedings of the 35th International Symposium on Theoretical Aspects of Computer Science (STACS'18)*, February 28-March 3, 2018, Caen, France. Vol. 96 of LIPIcs Series, Schloss Dagstuhl, 13:1-13:15, 2018.
- C58. D. Bilò, F. Colella, L. Gualà, S. Leucci, and G. Proietti, An improved algorithm for computing all the best swap edges of a tree spanner, *Proceedings of the 28th International Symposium on Algorithms and Computation (ISAAC'17)*, 9-12 December 2017, Phuket, Thailand. Vol. 92 of LIPIcs Series, Schloss Dagstuhl, 14:1-14:13, 2017.
- C57. F. Colella, M. D'Emidio, and G. Proietti, Simple and practically efficient fault-tolerant 2-hop cover labelings, *Proceedings of the 18th Italian Conference on Theoretical Computer Science (ICTCS'17)*, 26-29 September 2017, Naples, Italy. CEUR Workshop Proceedings 1949, 51–62, 2017.
- C56. D. Bilò, F. Colella, L. Gualà, S. Leucci, and G. Proietti, Effective edge-fault-tolerant single-source spanners via best (or good) swap edges, *Proceedings of the 24th International Colloquium on Structural Information and Communication Complexity (SIROCCO'17)*, June 19–22, 2017, Porquerolles, France. Vol. 10641 of Lecture Notes in Computer Science, Springer, 303–317, 2017.
- C55. A. Clementi, L. Gualà, G. Proietti, and G. Scornavacca, Rational fair consensus in the GOSSIP model, *Proceedings of the 31st IEEE International Parallel & Distributed Processing Symposium (IPDPS'17)*, May 29–June 2, 2017, Orlando, Florida, USA. IEEE Computer Society, 163–171, 2017.

- C54. M. D’Emidio, L. Forlizzi, D. Frigioni, S. Leucci, and G. Proietti, On the clustered shortest-path tree problem, *17th Italian Conference on Theoretical Computer Science (ICTCS’16)*, September 7–9, 2016, Lecce, Italy. Vol. 1720 of CEUR Workshop Proceedings, 263–268, 2016.
- C53. D. Bilò, L. Gualà, S. Leucci, and G. Proietti, Compact and fast sensitivity oracles for single-source distances, *Proceedings of the 24th European Symposium on Algorithms (ESA’16)*, August 22–24, 2016, Aarhus, Denmark. Vol. 57 of LIPIcs Series, Schloss Dagstuhl, 13:1–13:14, 2016.
- C52. K. Böhmová, J. Chalopin, M. Mihalák, G. Proietti, and P. Widmayer, Sequence hypergraphs, *Proceedings of the 42nd International Workshop on Graph-Theoretic Concepts in Computer Science (WG’16)*, June 22–24, 2016, Istanbul, Turkey. Vol. 9941 of Lecture Notes in Computer Science, Springer, 1–13, 2016.
- C51. D. Bilò, L. Gualà, S. Leucci, and G. Proietti, Multiple-edge-fault-tolerant approximate shortest-path trees, *Proceedings of the 33rd International Symposium on Theoretical Aspects of Computer Science (STACS’16)*, February 17–20, 2016, Orléans, France. Vol. 47 of LIPIcs Series, Schloss Dagstuhl, 18:1–18:14, 2016.
- C50. D. Bilò, F. Grandoni, L. Gualà, S. Leucci, and G. Proietti, Improved purely additive fault-tolerant spanners, *Proceedings of the 23rd European Symposium on Algorithms (ESA’15)*, September 14–16, 2015, Patras, Greece. Vol. 9294 of Lecture Notes in Computer Science, Springer, 167–178, 2015.
- C49. A. D’Andrea, M. D’Emidio, D. Frigioni, S. Leucci, and G. Proietti, Path-fault-tolerant approximate shortest-path trees, *Proceedings of the 22nd International Colloquium on Structural Information and Communication Complexity (SIROCCO’15)*, July 15–17, 2015, Mont Serrat, Spain. Vol. 9439 of Lecture Notes in Computer Science, Springer, 224–238, 2015.
- C48. D. Bilò, F. Colella, L. Gualà, S. Leucci, and G. Proietti, A faster computation of all the best swap edges of a tree spanner, *Proceedings of the 22nd International Colloquium on Structural Information and Communication Complexity (SIROCCO’15)*, July 15–17, 2015, Mont Serrat, Spain. Vol. 9439 of Lecture Notes in Computer Science, Springer, 239–253, 2015.
- C47. D. Bilò, L. Gualà, S. Leucci, and G. Proietti, Network creation games with traceroute-based strategies, *Proceedings of the 21st International Colloquium on Structural Information and Communication Complexity (SIROCCO’14)*, July 23–25, 2014, Hida Takayama, Japan. Vol. 8576 of Lecture Notes in Computer Science, Springer, 210–223, 2014.
- C46. A. D’Andrea, M. D’Emidio, D. Frigioni, S. Leucci, and G. Proietti, Experimental evaluation of dynamic shortest path tree algorithms on homogeneous batches, *Proceedings of the 13th International Symposium on Experimental Algorithms (SEA’14)*, Copenhagen, Denmark, June 29–July 1, 2014. Vol. 8504 of Lecture Notes in Computer Science, Springer, 283–294.
- C45. D. Bilò, Y. Disser, L. Gualà, M. Mihalák, G. Proietti, and P. Widmayer, Polygon-constrained motion planning problems, *Proceedings of the 9th International Symposium on Algorithms and Experiments for Sensor Systems, Wireless Networks and Distributed Robotics (ALGOSENSORS’13)*, Sophia Antipolis, France, September 5–6, 2013. Vol. 8243 of Lecture Notes in Computer Science, Springer, 67–82.
- C44. A. D’Andrea, M. D’Emidio, D. Frigioni, S. Leucci, and G. Proietti, Dynamically maintaining shortest path trees under batches of updates, *Proceedings of the 20th Colloquium on Structural Information and Communication Complexity (SIROCCO’13)*, Ischia, Italy, July 1–3, 2013. Vol. 8179 of Lecture Notes in Computer Science, Springer, 286–297.
- C43. A. D’Andrea and G. Proietti, Reoptimizing the strengthened metric TSP on multiple edge weight modifications, *Proceedings of the 11th International Symposium on Experimental Algorithms*

- (*SEA'12*), Bordeaux, France, June 7-9, 2012. Vol. 7276 of Lecture Notes in Computer Science, Springer, 111–122.
- C42. D. Bilò, M. Gatto, L. Gualà, G. Proietti, and P. Widmayer, Stability of networks in stretchable graphs, *Proceedings of the 16th Colloquium on Structural Information and Communication Complexity (SIROCCO'09)*, Piran, Slovenia, May 22-25, 2009. Vol. 5869 of Lecture Notes in Computer Science, Springer, 110–112.
- C41. D. Bilò, L. Gualà, G. Proietti, and P. Widmayer, Computational aspects of a 2-player Stackelberg shortest paths tree game, *Proceedings of the 4th Int. Workshop on Internet & Network Economics (WINE'08)*, Shanghai, China, December 17-20, 2008. Vol. 5385 of Lecture Notes in Computer Science, Springer-Verlag, 251–262.
- C40. D. Bilò, J. Derungs, L. Gualà, G. Proietti, and P. Widmayer, Locating facilities on a network to minimize their average service radius, *Proceedings of the 18th Int. Symposium on Algorithms and Computation (ISAAC'07)*, Sendai, Japan, December 17-19, 2007. Vol. 4835 of Lecture Notes in Computer Science, Springer-Verlag, 587–598.
- C39. D. Bilò, L. Forlizzi, L. Gualà, and G. Proietti, An algorithm composition scheme preserving monotonicity, *Proceedings of the 26th ACM Symposium on Principles of Distributed Computing (PODC'07)*, Portland, USA, August 12-15, 2007, ACM Press, 360–361.
- C38. G. Proietti and P. Widmayer, Partitioning the nodes of a graph to minimize the sum of subgraph radii, *Proceedings of the 17th Annual Int. Symposium on Algorithms and Computation (ISAAC'06)*, Kolkata, India, December 18-20, 2006. Vol. 4288 of Lecture Notes in Computer Science, Springer-Verlag, 578–587.
- C37. H.J. Böckenhauer, J. Kneis, J. Kupke, J. Hromkovic, L. Forlizzi, G. Proietti, and P. Widmayer, Reusing optimal TSP solutions for locally modified input instances, *Proceedings of the 4th IFIP Int. Conference on Theoretical Computer Science (TCS'06)*, Santiago, Chile, August 20-25, 2006. Vol. 209 of IFIP Int. Federation for Information Processing, Springer, 251–270.
- C36. D. Bilò, L. Gualà, and G. Proietti, Designing a truthful mechanism for a spanning arborescence bicriteria problem, *Proceedings of the 3rd Workshop on Combinatorial and Algorithmic Aspects of Networking (CAAN'06)*, Chester, UK, July 2, 2006. Vol. 4235 of Lecture Notes in Computer Science, Springer-Verlag, 19–30.
- C35. D. Bilò, L. Gualà, and G. Proietti, On the existence of truthful mechanisms for the minimum-cost approximate shortest-paths tree problem, *Proceedings of the 13th Colloquium on Structural Information and Communication Complexity (SIROCCO'06)*, Chester, UK, July 3-5, 2006. Vol. 4056 of Lecture Notes in Computer Science, Springer-Verlag, 295–309.
- C34. G. Proietti and P. Widmayer, A truthful mechanism for the non-utilitarian minimum radius spanning tree problem, *Proceedings of the 17th ACM Symposium on Parallelism in Algorithms and Architectures (SPAA'05)*, Las Vegas, NV, USA, July 17-20, 2005, ACM Press, 195–202.
- C33. L. Gualà and G. Proietti, A truthful $(2-2/k)$ -approximation mechanism for the Steiner tree problem with k terminals, *Proceedings of the 11th Int. Computing and Combinatorics Conference (COCOON'05)*, Kunming, China, August 16-19, 2005. Vol. 3595 of Lecture Notes in Computer Science, Springer-Verlag, 390–400.
- C32. D. Bilò and G. Proietti, Range augmentation problems in static ad-hoc wireless networks, *Proceedings of the 12th Colloquium on Structural Information and Communication Complexity (SIROCCO'05)*, Mont-St-Michel, France, May 24-26, 2005. Vol. 3499 of Lecture Notes in Computer Science, Springer-Verlag, 49–64.

- C31. D. Bilò and G. Proietti, Augmenting the edge-connectivity of a spider tree, *Proceedings of the 15th Annual Int. Symposium on Algorithms and Computation (ISAAC'04)*, Hong Kong, China, December 20-22, 2004. Vol. 3341 of Lecture Notes in Computer Science, Springer-Verlag, 157–169.
- C30. D. Bilò and G. Proietti, A $5/4$ -approximation algorithm for biconnecting a graph with a given Hamiltonian path, *Proceedings of the 2nd Workshop on Approximation and Online Algorithms (WAOA'04)*, Bergen, Norway, September 14-16, 2004. Vol. 3351 of Lecture Notes in Computer Science, Springer-Verlag, 181–196.
- C29. G. Melideo and G. Proietti, Truthful mechanisms for building trust in E-commerce, *Proceedings of the 2nd Int. Workshop on Certification and Security in Inter-Organizational E-Services (CSES'04)*, Toulouse, France, August 26-27, 2004, IFIP Workshop Proceedings, Springer, 101–112.
- C28. A. Di Pasquale, E. Nardelli, and G. Proietti, A lower bound for the DRT* with complete correction technique, *Proceedings of the 6th Int. Workshop on Distributed Data & Structures (WDAS'04)*, Lausanne, Switzerland, July 5-7, 2004.
- C27. M. Conforti, A. Galluccio, and G. Proietti, Edge-connectivity augmentation and network matrices, *Proceedings of the 30th Int. Workshop on Graph-Theoretic Concepts in Computer Science (WG'04)*, Bonn, Germany, June 21-23, 2004. Vol. 3353 of Lecture Notes in Computer Science, Springer-Verlag, 355–364.
- C26. G. Melideo, P. Penna, G. Proietti, R. Wattenhofer, and P. Widmayer, Truthful mechanisms for generalized utilitarian problems, *Proceedings of the 3rd IFIP Int. Conference on Theoretical Computer Science (TCS'04)*, Toulouse, France, August 24-26, 2004, IFIP Conference Proceedings, Kluwer Academic Press, 167–180.
- C25. A. Di Pasquale, E. Nardelli, and G. Proietti, An RP* extension with almost constant amortized costs, *Proceedings of the 5th Int. Workshop on Distributed Data & Structures (WDAS'03)*, Aristotle University of Thessaloniki, Greece, June 12-13, 2003. Vol. 19 of Proceedings in Informatics, Carleton Scientific, 1–16.
- C24. C. Gaibisso, G. Proietti, and R. Tan, Optimal MST maintenance for transient deletion of every node in planar graphs, *Proceedings of the 9th Annual Int. Computing and Combinatorics Conf. (COCOON'03)*, Big Sky, MT, USA, July 25-28, 2003. Vol. 2697 of Lecture Notes in Computer Science, Springer-Verlag, 404–414.
- C23. V. Bilò, A. Di Pasquale, F. Fioravanti, M. Flammini, L. Forlizzi, F. Lo Presti, G. Melideo, E. Nardelli, A. Navarra, and G. Proietti, Quality of Service in wireless networks, *Proceedings of the 3rd Int. Workshop on Wireless, Mobile and Ad Hoc Networks (WMAN'03)*, Nice, France, April 22- 26, 2003.
- C22. A. Galluccio and G. Proietti, A faster approximation algorithm for 2-edge-connectivity augmentation, *Proceedings of the 13th Annual Int. Symposium on Algorithms and Computation (ISAAC'02)*, Vancouver, Canada, November 21-23, 2002. Vol. 2518 of Lecture Notes in Computer Science, Springer-Verlag, 150–162.
- C21. A. Di Pasquale, E. Nardelli, and G. Proietti, An improved upper bound for scalable distributed search trees, *Proceedings of the 4th Int. Workshop on Distributed Data & Structures (WDAS'02)*, University Paris 9 Dauphine, Paris, France, March 20-23, 2002. Vol. 14 of Proceedings in Informatics, Carleton Scientific, 133–142.

- C20. A. Galluccio and G. Proietti, Polynomial time algorithms for edge-connectivity augmentation of Hamiltonian paths, *Proceedings of the 12th Annual Int. Symposium on Algorithms and Computation (ISAAC'01)*, Christchurch, New Zealand, December 19-21, 2001. Vol. 2223 of Lecture Notes in Computer Science, Springer-Verlag, 345–354.
- C19. G. Proietti, Dynamic maintenance *Proceedings of the versus* swapping: an experimental study on shortest paths trees, *Proceedings of the 3rd Workshop on Algorithm Engineering (WAE 2000)*, Saarbrücken, Germany, September 5-8, 2000. Vol. 1982 of Lecture Notes in Computer Science, Springer-Verlag, 207–217.
- C18. E. Nardelli, G. Proietti, and P. Widmayer, Maintaining a minimum spanning tree under transient node failures, *Proceedings of the 8th European Symposium on Algorithms (ESA 2000)*, Saarbrücken, Germany, September 5-8, 2000. Vol. 1879 of Lecture Notes in Computer Science, Springer-Verlag, 346–355.
- C17. E. Nardelli and G. Proietti, Size estimation of the intersection join between two line segment datasets, *Proceedings of the Advances in Databases and Information Syst. (ADBIS 2000)*, Prague, Czech Republic, September 5-8, 2000. Vol. 1884 of Lecture Notes in Computer Science, Springer-Verlag, 229–238.
- C16. E. Nardelli and G. Proietti, S*-tree: an improved S⁺-tree for coloured images, *Proceedings of the Advances in Databases and Information Syst. (ADBIS'99)*, Maribor, Slovenia, September 13-16, 1999. Vol. 1691 of Lecture Notes in Computer Science, Springer-Verlag, 156–167.
- C15. Y. Gong, G. Proietti, and D. La Rose, A robust image mosaicing technique capable of creating integrated panoramas, *Proceedings of the IEEE Int. Conf. on Information Visualization (IV'99)*, London, United Kingdom, July 16-18, 1999, 24–29.
- C14. E. Nardelli, G. Proietti, and P. Widmayer, How to swap a failing edge of a single source shortest paths tree, *Proceedings of the 5th Annual Int. Computing and Combinatorics Conf. (COCON'99)*, Tokyo, Japan, July 23-26, 1999. Vol. 1627 of Lecture Notes in Computer Science, Springer-Verlag, 144–153.
- C13. G. Proietti and C. Faloutsos, I/O complexity for range queries on region data stored using an R-tree, *Proceedings of the 15th IEEE Int. Conf on Data Engineering (ICDE'99)*, Sydney, Australia, March 23-26, 1999, 628–635.
- C12. G. Proietti and C. Faloutsos, Selectivity estimation of spatial queries for line segment datasets, *Proceedings of the 7th ACM Int. Conf of Information and Knowledge Management (CIKM'98)*, Washington DC, USA, November 3-7, 1998, 340–347.
- C11. Y. Gong, G. Proietti, and C. Faloutsos, Image indexing and retrieval based on human perceptual color clustering, *Proceedings of the IEEE Int. Conf. on Computer Vision and Pattern Recognition (CVPR'98)*, Santa Barbara, CA, USA, June 23-25, 1998, 578–583.
- C10. C. Gaibisso and G. Proietti, Efficient insertion of approximately sorted sequences of elements into a dictionary, *Proceedings of the 24th Seminar on Current Trends in Theory and Practice of Informatics (SOFSEM'97)*, Milovy, Czech Republic, November 1997. Vol. 1338 of Lecture Notes in Computer Science, Springer-Verlag, 399–406.
- C9. C. Gaibisso, E. Nardelli, and G. Proietti, Incremental constraints maintenance in concurrent logic programming, *Proceedings of the 11th Int. Symposium on Computer and Information Sciences (ISCIS'96)*, Antalya, Turkey, November 1996, 703–712.
- C8. C. Gaibisso, E. Nardelli, and G. Proietti, An output sensitive solution to the set union and intersection problem, *Proceedings of the 23th Seminar on Current Trends in Theory and Practice*

- of *Informatics (SOFSEM'96)*, Czech Republic, 1996. Vol. 1175 of Lecture Notes in Computer Science, Springer-Verlag, 351–358.
- C7. Y. Manolopoulos, E. Nardelli, A. Papadopoulos, and G. Proietti, QR-tree: a hybrid spatial data structure, *Proceedings of the Int. Conf. on GIS in Urban, Environmental and Regional Planning (SAMOS'96)*, Isole Samos, Greece, 1996, 247–259.
- C6. Y. Manolopoulos, E. Nardelli, G. Proietti, and M. Vassilakopoulos, On the generation of aggregated random spatial regions, *Proceedings of the 4th ACM Int. Conf of Information and Knowledge Management (CIKM'95)*, Baltimore, Maryland, USA, 1995, 318–325.
- C5. M. Fossa, E. Nardelli, and G. Proietti, A multistage approach to complex document interpretation, *Proceedings of the 8th International Symposium in Informatics Applications (INFONOR'94)*, Antofagasta, Chile, 1994.
- C4. E. Nardelli and G. Proietti, Managing overlapping features in spatial database applications, *Proceedings of the International Computer Symposium (ICS'94)*, Hsinchu, Taiwan, 1994, 1297–1302.
- C3. E. Nardelli and G. Proietti, An accurate model for quadtrees representing noiseless images, *Proceedings of the 1st IEEE Int. Conf. on Image Processing (ICIP'94)*, Austin, Texas, USA, 1994, 610–614.
- C2. E. Nardelli and G. Proietti, A hybrid pointerless representation of quadtrees for efficient processing of window queries, *Proceedings of the Int. Workshop on Advanced Research in Geographic Images of Spatial Data (IGIS'94)*, Ascona, Switzerland, April 1994. Vol. 884 of Lecture Notes in Computer Science, Springer-Verlag, 259–269.
- C1. M. Fossa, E. Nardelli, and G. Proietti, Raster to object conversion aided by knowledge based image processing, *Proceedings of the 2nd IEEE Int. Conf. on Document Analysis and Recognition (ICDAR'93)*, Tokio, Japan, 1993, 951–954.

Autorizzo il trattamento e la pubblicazione dei miei dati personali presenti nel cv ai sensi del Decreto Legislativo 30 giugno 2003, n. 196 “Codice in materia di protezione dei dati personali” e del GDPR (Regolamento UE 2016/679)

L'Aquila, 28 Settembre 2018

Firma
