Curriculum Vitae di GUIDO PROIETTI

Aggiornato al 20 Giugno 2015

con elenco completo delle pubblicazioni

DATI BIOGRAFICI FONDAMENTALI E POSIZIONI RICOPERTE

Guido Proietti è nato a Roma il 13 giugno 1966, ed è Professore Straordinario a tempo pieno 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.

Si è laureato col massimo dei voti in Matematica nel 1990, presso l'Università degli Studi di Roma "La Sapienza", discutendo una tesi dal titolo "Gestione euristica di dizionari su modelli di memoria gerarchica", sotto la direzione del Prof. D.P. Bovet.

Ha svolto attività di formazione alla ricerca post-laurea presso l'Istituto di Analisi dei Sistemi ed Informatica "Antonio Ruberti" del CNR di Roma, dove ha usufruito di borse di studio.

Nel 1997 è risultato vincitore di una borsa di studio annuale per l'estero CNR-NATO. Ha usufruito di tale borsa in qualità di *visiting scientist* presso il *Computer Science Department* della Carnegie Mellon University, dal settembre 1997 al luglio 1998, sotto la supervisione del Prof. Christos Faloutsos.

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

Dal giugno 2008 ad oggi è stato Vice-Presidente del Consiglio Didattico di Corso di Studio di Informatica dell'Università degli Studi dell'Aquila.

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 è membro del Presidio della Qualità di Ateneo dell'Università degli Studi dell'Aquila.

Dall'ottobre 2013 è membro della Giunta del Dipartimento di Ingegneria e Scienze dell'Informazione e Matematica dell'Università degli Studi dell'Aquila.

Dall'aprile 2014 è coordinatore per il nodo presso l'Università degli Studi dell'Aquila del Laboratorio Nazionale "CFC: Competenze ICT, Formazione, Certificazione" del CINI.

Dal luglio 2014 è membro del comitato scientifico dell'iniziativa in collaborazione tra il CINI e il Ministero dell'Istruzione, Università e Ricerca per l'introduzione dell'insegnamento dell'informatica nella scuola primaria, denominata "Programma il Futuro".

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

Attività scientifica

È autore o coautore di 119 pubblicazioni scientifiche internazionali nell'ambito dell'informatica: 1 Capitolo di un Libro, 44 lavori in Riviste Scientifiche internazionali (22 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 74 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, Salonicco, 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 consessi 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)*.

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.

Ha fatto parte nell'arco temporale 1993-2007 di 12 Unità di Ricerca in altrettanti Progetti di Ricerca nazionali ed internazionali, contribuendo per 5 di essi alla redazione della proposta.

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 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 dell'Assegno di Ricerca relativo al programma "Aspetti algoritmici di reti di comunicazione non cooperative", attivato presso il Dipartimento di Informatica dell'Università degli Studi dell'Aquila a partire dal marzo 2009.

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

È stato Vice-Responsabile per l'unità locale presso l'Universita degli Studi dell'Aquila del progetto "Algorithms for Techno-Mediated Social Networks (ARS TechnoMedia)", co-finanziato dal MIUR nell'ambito del PRIN 2010.

Attività didattica

Dal settembre 1992 al febbraio 1996, ha prestato servizio quale docente di ruolo di Matematica presso l'Istituto Professionale Statale "Virginia Woolf" di Roma, essendo risultato vincitore del concorso a cattedra per Istituti Secondari di Secondo Grado per la Classe A063 (*Matematica*).

Dal settembre 1994 ad oggi ha svolto attività didattica in 9 diversi corsi di informatica presso la Facoltà di Scienze Matematiche, Fisiche e Naturali dell'Università degli Studi dell'Aquila, prima come cultore della materia, poi come Ricercatore Universitario ed infine in qualità di Professore Associato.

Dal marzo 1996 ad oggi è stato relatore di 32 Tesi di Laurea in Informatica, nei diversi ordinamenti didattici che si sono succeduti nel tempo.

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) Corso da 6 CFU di "Algoritmi per Sistemi Distribuiti".

È stato tutore di 3 studenti (Luciano Gualà, Davide Bilò e Annalisa D'Andrea) del Dottorato di Ricerca del XIX ciclo in "Informatica ed Applicazioni" con sede amministrativa presso il Dipartimento di Informatica dell'Università degli Studi dell'Aquila.

È attualmente tutore di uno studente (Stefano Leucci) del Dottorato di Ricerca del XXVIII ciclo in "Ingegneria e Scienze dell'Informazione", entrambi con sede amministrativa presso il Dipartimento di Ingegneria e Scienze dell'Informazione e Matematica dell'Università degli Studi dell'Aquila.

Ha svolto attività di docenza presso le sedi (Acireale, Bologna, Roma, Caserta e Reggio Calabria) della Scuola Nazionale dell'Amministrazione, nell'ambito di vari corsi di avviamento al nuovo Codice dell'Amministrazione Digitale.

Elenco completo delle pubblicazioni

Nota: Le pubblicazioni sono divise per tipologia di sede di pubblicazione (**V** per Volumi Editi, **L** per Capitoli di libri, **R** per Riviste Internazionali, **C** per Atti di Conferenze Internazionali, e **T** per Rapporti Tecnici Referati), 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

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 in Spatio-Temporal Databases: The CHOROCHRONOS Approach, Vol. 2520 of Lecture Notes in Computer Science, Springer-Verlag, 2003.

Riviste Internazionali

R44. 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*, accepted for publication.

R43. D. Bilò, L. Gualà, S. Leucci, and G. Proietti, Local-knowledge network creation games, *ACM Transactions on Parallel Computing*, accepted for publication. 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.

R42. D. Bilò, L. Gualà, and G. Proietti, Bounded-distance network creation games, *ACM Transactions on Economics and Computation*, accepted for publication. 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*, accepted for publication. 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. Hromkǒvic, 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 (AL-GOSENSORS'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. Hromkǒvic, 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. Hromkǒvic, 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. Hromkǒvic, 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)*, Saarbrucken, 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

C52. D. Bilò, F. Grandoni, L. Gualà, S. Leucci, and G. Proietti, Improved purely additive fault-tolerant spanners, accepted for presentation at the *23rd European Symposium on Algorithms (ESA'15)*, September 14-16, 2015, Patras, Greece. Proceedings will appear on Lecture Notes in Computer Science, Springer.

C51. A. D'Andrea, M. D'Emidio, D. Frigioni, S. Leucci, and G. Proietti, Path-fault-tolerant approximate shortest-path trees, accepted for presentation at the *22nd International Colloquium on Structural Information and Communication Complexity (SIROCCO'15)*, July 15-17, 2015, Mont Serrat, Spain. Proceedings will appear on Lecture Notes in Computer Science, Springer.

C50. D. Bilò, F. Colella, L. Gualà, S. Leucci, and G. Proietti, A faster computation of all the best swap edges of a tree spanner, accepted for presentation at the *22nd International Colloquium on Structural Information and Communication Complexity (SIROCCO'15)*, July 15-17, 2015, Mont Serrat, Spain. Proceedings will appear on Lecture Notes in Computer Science, Springer.

C49. D. Bilò, L. Gualà, S. Leucci, and G. Proietti, Fault-tolerant approximate shortest-path trees, *Proceedings of the 22nd European Symposium on Algorithms (ESA'14)*, September 8-10, 2014, Wroclaw, Poland. Vol. 8737 of Lecture Notes in Computer Science, Springer, 137–148, 2014.

C48. D. Bilò, L. Gualà, S. Leucci, and G. Proietti, Network creation games with traceroute-based strategies, *Proceedings of the 21th 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.

C47. 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.

C46. D. Bilò, Y. Disser, L. Gualà, M. Mihal'ak, 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.

C45. 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.

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Rapporti Tecnici

Nota: I lavori riportati in questa sezione che risultano editi nella collana dei Rapporti Tecnici dello IASI-CNR, sono stati accettati a seguito di un **processo di revisione** da parte di un esperto di area afferente allo IASI. I lavori che risultano invece editi nella serie *Electronic Colloquium on Computational Complexity (ECCC)*, sono stati accettati a seguito di un **giudizio di rilevanza e congruità** formulato da un esperto di area del relativo Comitato Editoriale.

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