

Curriculum Vitae et Studiorum: Gennaro Cordasco

PERSONAL DATA First Name: Gennaro
Family Name: Cordasco
Birth Date: 08/05/1978
Birth Place: Battipaglia (SA), Italy
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Current Affiliation

Dipartimento di Informatica e Applicazioni
Università degli Studi di Salerno
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CURRENT POSITION Post-Doc at Dipartimento di Informatica ed Applicazioni in the Università degli studi di Salerno (Italy).

STUDIES

- On April 2006, he received the PhD in Computer Science discussing a thesis on Peer-to-Peer Systems whose title is: “*On Designing Overlay Networks for Peer-to-Peer Systems*”. The thesis was supervised by Prof. Alberto Negro.
- On July 2002, he received a Laurea cum laude in Informatica (“Computer Science”) at the Università degli studi di Salerno, with a thesis in Distributed algorithms whose title is: “*Un algoritmo di mapping ottimale per alberi binari completi su memorie parallele*” (“*An optimal mapping algorithm for complete binary trees to parallel memories*”). The thesis was supervised by Prof. Alberto Negro and Vittorio Scarano.

EXPERIENCES **November 2008** ⇒ **November 2010**. Research fellow (Assegno di Ricerca), Area: Computer Scienze(INF/01), Institution: Dipartimento di Informatica ed Applicazioni ‘R.M. Capocelli’ of the Università degli Studi di Salerno. (Resp. Prof. Alberto Negro)

- September 2007** \Rightarrow **November 2008**. Research fellow (Assegno di Ricerca), Area: Computer Scienze(INF/01), Institution: Dipartimento di Informatica ed Applicazioni ‘R.M. Capocelli’ of the Università degli Studi di Salerno. (Resp. Prof. Vittorio Scarano)
- July 2007** \Rightarrow **August 2007**. Research contract: “LEAD: Technology-enhanced learning and problem-solving discussions: Networked learning environments in the classroom”, Institution: Dipartimento di Informatica ed Applicazioni ‘R.M. Capocelli’ of the Università degli Studi di Salerno. (Resp. Prof. Vittorio Scarano)
- June 2006** \Rightarrow **July 2007**. Research fellow (Borsa di Studio Post-Doc), Area: Computer Scienze(INF/01), Institution: Dipartimento di Informatica ed Applicazioni ‘R.M. Capocelli’ of the Università degli Studi di Salerno. (Resp. Prof. Alberto Negro)
- January 2006** \Rightarrow **March 2006**. Research contract: Project ‘WEB-MINDS - Wide Scale, Broadband, Middleware, for Network Distributed Services’, Institution: Dipartimento di Informatica ed Applicazioni ‘R.M. Capocelli’ of the Università degli Studi di Salerno. (Resp. Prof.sa Luisa Gargano)
- March 2005** \Rightarrow **November 2005**. Research Scholar, Institution: University of Massachussets - AMHERST, Department of Computer Science (Resp. Prof. Arnold L. Rosenberg)
- November 2002** \Rightarrow **October 2005**. PhD Student, Institution: Dipartimento di Informatica ed Applicazioni ‘R.M. Capocelli’ of the Università degli Studi di Salerno. (Resp. Prof. Alberto Negro)
- October 2002** \Rightarrow **June 2003**. Research contract: Project ‘WEB-MINDS - Wide Scale, Broadband, Middleware, for Network Distributed Services’, Institution: Dipartimento di Informatica ed Applicazioni ‘R.M. Capocelli’ of the Università degli Studi di Salerno. (Resp. Prof. Alberto Negro)

COURSES AND
SCHOOLS

- October 2002, *Automata and Logics*, Prof.ssa Margherita Napoli - (Università di Salerno).
- December 2002 and June 2003, *Machine Learning*, Prof. Nello Cristianini - (Università California-Davis).
- March-June 2003, *Distributed Algorithms*, Prof. Roberto De Prisco - (Università di Salerno).
- April 2003, *Algorithms for selfish agents*, Docenti: Prof. Vincenzo Auletta e Prof. Giuseppe Persiano (Università di Salerno).
- February 2004, *Territorial Informative Systems*, Prof. Robert Laurini (National Institute for Applied Sciences Lione, France).
- April 2004, *Theory of Concurrent and Distributed Programming*, Prof. Roberto Gorrieri (Università di Bologna), corso tenutosi a Salerno.

- May 2006, *Scheduling for new execution supports* (International Center for Mathematical Meetings (CIRM)) organized by D. Trystram (Prof., INP Grenoble) and J. Blazewicz (Prof., TU Poznan).
- SHORT-TERM VISITS From March 2005 to November 2005, Research Scholar at the TAPADS (Theoretical Aspect of Parallel and Distributed Systems) Lab, in the Department of Computer Science, University of Massachusetts at Amherst, MA, USA (Supervisor: Dist. Prof. A. L. Rosenberg).
- LANGUAGES Italian (mother tongue) and English (FCE / Cambridge ESOL).
- RESEARCH PROJECTS PARTICIPATION
 - “LEAD: Technology-enhanced learning and problem-solving discussions: Networked learning environments in the classroom”
Dipartimento di Informatica ed Applicazioni ‘R.M. Capocelli’ dell’Università di Salerno. (Dec. 2005 - Nov. 2008).
 - “WEB-MINDS - Wide ScaleE, Broadband, Middleware, for Network Distributed Services” (FIRB) (Nov. 2002 - Ott. 2005)
Aim of the project: Design and implement a platform for: Ubiquitous remote access (anything, anywhere, anytime); Multimedia communications Remote control; Service customization; Data downloading and uploading.
- PUBLICATIONS **Journal Publications:**
1. G. Cordasco, A. L. Rosenberg and M. Sims
“*On Clustering Dags for Task-Hungry Computing Platforms*”.
In Central European Journal of Computer Science (CEJCS). (To Appear)
 2. G. Cordasco, R. De Chiara and A. Fish
“*Efficient on-line algorithms for Euler diagram region computation*”.
In Computational Geometry-Theory and applications (CGTA), Volume 44 Issue 1 ISSN: 0925-772, Pages 52-68, January 2011.
 3. G. Cordasco, G. Malewicz and A. L. Rosenberg,
“*Extending IC-Scheduling via the Sweep Algorithm*”.
In Journal of Parallel and Distributed Computing - Elsevier (JPDC). , Vol. 70 Issues 3, ISSN: 0743-7315, Pages 201-211, March 2010.
 4. G. Cordasco and L. Gargano,
“*Navigable Small-World Networks with Few Random Bits*”.
In Theoretical Computer Science - Elsevier (TCS), Vol. 410 Issues 47-49, ISSN: 0304-3975, Pages 4975-4988, November 2009.
 5. G. Chiola, G. Cordasco, L. Gargano, M. Hammar, A. Negro and V. Scarano,
“*Degree-Optimal Routing for P2P Systems*”.

- In Theory of Computing Systems (ToCS), Vol. 45 No. 1, ISSN: 1432-4350, pages 43-63, June 2009.
6. G. Cordasco, B. Cosenza, R. De Chiara, U. Erra and V. Scarano, “*Experiences with Mesh-like computations using Prediction Binary Trees*”. In Scalable Computing: Practice and Experience (SCPE), Scientific International Journal for Parallel and Distributed Computing, Vol. 10 No. 2, ISSN:1895-1767 , pages 173-187, June 2009.
 7. G. Cordasco, L. Gargano, M. Hammar, A. Negro and V. Scarano “*F-Chord: Improved Uniform Routing on Chord*”. In Networks (Wiley InterScience), Vol. 52 No. 4, ISSN: 0028-3045, pages 325-332, December 2008.
 8. G. Chiola, G. Cordasco, L. Gargano, A. Negro and V. Scarano, “*Optimizing the finger table in Chord-like DHTs*”. In Concurrency and Computation: Practice and Experience (Wiley InterScience), Vol. 20, No. 6, ISSN: 1532-0634, pages 643-657, April 2008.
 9. G. Cordasco, G. Malewicz and A. L. Rosenberg, “*Advances in a Dag-Scheduling Theory for Internet-Based Computing*”. In IEEE Transaction on Parallel and Distributed Systems (TPDS) Vol. 18, No. 11, ISSN: 1045-9219, November 2007.
 10. G. Cordasco, V. Scarano and A. L. Rosenberg, “*Bounded-Collision Memory-Mapping Schemes for Data Structures, with Applications to Parallel Memories*”. In IEEE Transaction on Parallel and Distributed Systems (TPDS) Vol. 18, No. 7, ISSN: 1045-9219, July 2007.

Refereed Conference Proceedings:

11. P. Bottoni, G. Cordasco, R. De Chiara, A. Fish and V. Scarano “*Personalised Resource Categorisation using Euler Diagrams*”. In Proc. of the Third International Symposium on End-User Development (IS-EUD 2011). Torre Canne (Brindisi), Italy, June 7-10, 2011. (To Appear)
12. B. Cosenza, G. Cordasco, R. De Chiara and V. Scarano, “*Distributed Load Balancing for Parallel Agent-based Simulations*”. In Proc. of the 19th Euromicro International Conference on Parallel, Distributed and Network-Based Computing (PDP 2011). Ayia Napa, Cyprus, February 09 - 11, 2011.
13. G. Cordasco and L. Gargano “*Community Detection via SemiSynchronous Label Propagation Algorithms*”. In: International Workshop on Business Applications of Social Network Analysis (BASNA 2011) (collocated with IMSAA-10). Bangalore (INDIA), December 15, 2010.

14. C. Caponigri, G. Cordasco, R. De Chiara and V. Scarano
“*Improved Load Balancing on Distributed Massive Simulation Environments*”. In Proc. of the First International International Workshop on P2P Collaborative Distributed Virtual Environments (P2P-CDVE 2010). Crete, Greece, October 26, 2010.
15. C. Caponigri, G. Cordasco, R. De Chiara and V. Scarano
“*Experiences with a P2P Infrastructure for Massive Simulations*”.
In Proc. of the Second International Conference on Advances in P2P Systems (AP2PS 2010). Florence, Italy, October 25 - 30, 2010.
16. G. Cordasco, A. L. Rosenberg
“*Area-Maximizing Schedules for Series-Parallel DAGs*”.
In Proc. of International European Conference on Parallel and Distributed Computing (EuroPar 2010). Ischia Island, Italy, Aug 31- Sep 3, 2010.
17. G. Cordasco, R. De Chiara, U. Erra and V. Scarano
“*Some Considerations on the Design of a P2P Infrastructure for Massive Simulations*”.
In International Conference on Ultra Modern Telecommunication (ICUMT 2009). October 2009, St.-Petersburg, Russia.
18. G. Cordasco, R. De Chiara and A. Fish,
“*Interactive Visual Classification with Euler Diagrams*”.
In Proc. of IEEE Symposium on Visual Languages and Human-Centric Computing (VL/HCC 2009). September 2009, Corvallis, Oregon, USA.
19. G. Cordasco and A. L. Rosenberg
“*On Scheduling Dags to Maximize Area*”. In Proc. of of IEEE International Parallel & Distributed Processing Symposium (IPDPS 2009). May 2009, Rome, Italy.
20. G. Cordasco, F. Della Corte, A. Negro, A. Sala, and V. Scarano,
“*Relaxed-2-Chord: Efficiency, Flexibility and provable Stretch*”. In Proc. of Sixth International Workshop on Hot Topics in Peer-to-Peer Systems (HotP2P 2009), held in conjunction with the IEEE International Parallel & Distributed Processing Symposium (IPDPS 2009), May 29, 2009 Rome, Italy.
21. M. Sims, G. Cordasco and A. L. Rosenberg,
“*On Clustering Tasks in IC-Optimal Dags*”.
In Proc. of International Conference on Parallel Processing (ICPP 2008). September 812, Portland, Oregon, USA.
22. B. Cosenza, G. Cordasco, R. De Chiara, U. Erra and V. Scarano,
“*On Estimating the Effectiveness of Temporal and Spatial Coherence in Parallel Ray Tracing*”.

- In Proc. of 6th Eurographics Italian Chapter Conference (EG-It 2008).
July 2-4, Salerno, Italy.
23. B. Cosenza, G. Cordasco, R. De Chiara, U. Erra and V. Scarano,
“*Load Balancing in Mesh-like Computations using Prediction Binary Trees*”.
In Proc. of 7th International Symposium on Parallel and Distributed
Computing (ISPDC 2008). July 1-5, Krakow, Poland.
24. G. Cordasco, G. Malewicz and A. L. Rosenberg,
“*Extending IC-Scheduling Theory via the Sweep Algorithm*”.
In Proc. of 16th Euromicro Conference on Parallel Distributed and network-
based Processing (PDP 2008) February 13-15, 2008 - Toulouse, France.
25. G. Cordasco, G. Malewicz and A. L. Rosenberg,
“*Applying IC-Scheduling Theory to Familiar Classes of Computations*”.
In Proc. of Workshop on Large-Scale, Volatile Desktop Grids (PCGrid
2007) March 30, 2007, Long Beach, California U.S.A.
26. G. Cordasco, A. Negro, A. Sala and V. Scarano
“*PON: Exploiting Proximity on Overlay Networks*”.
In Proc. of Fourth International Workshop on Hot Topics in Peer-to-Peer
Systems (HotP2P 2007) March 30, 2007, Long Beach, California U.S.A.
27. G. Cordasco and L. Gargano,
“*How Much Independent Should Individual Contacts be to Form a Small World?*”.
In Proc. of 17th International Symposium on Algorithms and Computa-
tion (ISAAC 2006), Kolkata (India), December 18-20, 2006
28. G. Cordasco, G. Malewicz and A. L. Rosenberg,
“*On Scheduling Expansive and Reductive Dags for
Internet-Based Computing*”.
In Proc. of 26th International Conference on Distributed Computing
Systems (ICDCS 2006) - Lisboa, Portugal, July 4-7, 2006 .
29. G. Chiola, G. Cordasco, L. Gargano, A. Negro and V. Scarano,
“*Optimizing the finger table in Chord-like DHTs*”.
In Proc. of 3rd International Workshop on Hot Topics in Peer-to-Peer
Systems (Hot-P2P06) (Co-Located with IPDPS 2006) Rhodes, Greece,
April 29, 2006.
30. G. Chiola, G. Cordasco, L. Gargano, A. Negro and V. Scarano,
“*Overlay networks with class*”.
In Proc. of 8th International Symposium on Parallel Architectures, Algo-
rithms, and Networks (I-SPAN 2005) Las Vegas, Nevada, USA, December
7-9, 2005.
31. G. Cordasco and A. Sala,
“*2-Chord Halved*”.
In Proc. of 2nd International Workshop on Hot Topics in Peer-to-Peer

- Systems (Hot-P2P05) (Co-Located with Mobiquitous 2005) San Diego, CA, USA, July 21, 2005.
32. G. Cordasco, L. Gargano, M. Hammar and V. Scarano,
“*Degree-Optimal Deterministic Routing for P2P Systems*”.
In Proc. of 10th IEEE Symposium on computers and communications (ISCC 2005) La Manga del Mar Menor, Cartagena, Spain, June 27-30, 2005.
 33. G. Cordasco, L. Gargano, M. Hammar, A. Negro and V. Scarano,
“*Non-uniform deterministic routing on F-Chord(α)*”.
In Proc. of 1st International Workshop on Hot Topics in Peer-to-Peer Systems (Hot-P2P04) Volendam (The Netherland), October 08, 2004.
 34. G. Cordasco, V. Scarano and C. Vitolo,
“*A P2P Distributed Adaptive Director*”.
In Proc. of Adaptive Hypermedia 2004 (AH04) Eindhoven (The Netherland), August 23-26, 2004.
 35. G. Cordasco, L. Gargano, M. Hammar and V. Scarano,
“*Brief Announcement: Degree-Optimal Deterministic Routing for P2P Systems*”.
In Proc. of 23rd Annual ACM SIGACT-SIGOPS Symposium on Principles of Distributed Computing (PODC 2004) (Brief Announcement) St. John’s, Newfoundland, Canada, July 25-28, 2004.
 36. G. Cordasco, L. Gargano, M. Hammar, A. Negro and V. Scarano,
“*F-Chord: Improved Uniform Routing on Chord*”.
In Proc. of 11th Colloquium on Structural Information and Communication Complexity (Sirocco) Smolenice Castle, Slovakia, June 21-23, 2004.
 37. G. Cordasco, V. Scarano and C. Vitolo,
“*Architecture of a P2P Distributed Adaptive Directory*”.
In Proc. of 13th International World Wide Web Conference (WWW04)(Poster) New York, May 17-22, 2004.
 38. G. Cordasco, A. Negro, A.L. Rosenberg and V. Scarano,
“*c-Perfect Hashing Schemes for Binary Trees, with Applications to Parallel Memories*”.
In Proc. of International Conference on Parallel and Distributed Computing (EuroPar) Klagenfurt (Osterreich), August 26-29, 2003.
 39. G. Cordasco, A. Negro, A.L. Rosenberg and V. Scarano,
“*c-Perfect Hashing Schemes for Arrays, with Applications to Parallel Memories*”.
In Proc. of 5th Workshop on Distributed Data and Structures (WDAS) Thessaloniki (Greece), June 13-14, 2003.

Submitted papers:

- G. Cordasco and L. Gargano
“*Label Propagation Algorithm: A Semi-Synchronous Approach*”.
- G. Cordasco, R. De Chiara and A. L. Rosenberg
“*Assessing the Computational Benefits of AREA-Oriented DAG-Scheduling*”.
- G. Cordasco, R. De Chiara and A. Fish,
“*Region computations for Euler Diagrams with relaxed constraints*”.

REFEREING
ACTIVITY

He has been involved in reviewing processes for several international journals and conferences on Parallel and Distributed Systems. Among them, Theory of Computing Systems (ToCS), IEEE Transaction on Parallel and Distributed Systems (TPDS), Hot topics on Peer-to-Peer Systems (HotP2P), Adaptive Hypermedia (AH), Eurographics Italia Chapter (EG_it), Journal of Parallel and Distributed Computing (JPDC), Journal of Scheduling (J Sched), IEEE International Parallel and Distributed Processing Symposium (IPDPS).

RESEARCH
ACTIVITY

Distributed Algorithms, Distributed Data Structures, Peer-to-Peer Systems and Internet-based Computing.

Date:
February, 2011

Signature