



Curriculum Vitae

Aris T. Pagourtzis

Contact Information

National Technical University of Athens School of Electrical and Computer Engineering Heron Politechniou 9 GR-15780 Zographou, Greece	tel: +30-210-7721640 fax: +30-210-7721645 email: pagour@cs.ntua.gr http://www.softlab.ntua.gr/~pagour
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Personal. Born in Volos (1967), married, three children.

Studies. Diploma in Electrical Engineering (1989) and Ph.D. in Electrical and Computer Engineering (1999), NTU Athens, Greece.

Military service. Greek Army (full service: Mar 1996 - Sep 1997).

Positions. Current: Associate Professor at the School of Electrical and Computer Engineering of NTUA. Earlier: Visiting Professor at the University of Ioannina (2000), Research Associate at the University of Liverpool (2000-2002), Visiting Research Fellow at ETH Zuerich (Nov-Dec 2000 and Mar-Jul 2002), Adjunct Lecturer at the University of Athens and at NTUA (2003-2005), Lecturer (2006-2010) and Assistant Professor (2010-2015) at the School of Electrical and Computer Engineering of NTUA.

Academic Service. *PC member:* 10th International Conference on Algorithms and Complexity (CIAC 2017), 14th International Symposium on Pervasive Systems, Algorithms, and Networks (I-SPAN 2017, "Distributed algorithms and graph computing" Track), 14th International Symposium on Experimental Algorithms (SEA 2015), Data Protection and Security (DPS - IISA 2014), WAOA 2008, AdHocNow 2007, AtheCrypt (2013, '14, '15, '16, '17, '18), and Athens Colloquium on Algorithms and Complexity (ACAC 2006-2017 each year). *Organizing Committee* co-chair of CIAC 2017. *Workshops chair* of AdHocNow 2015. Local committee member of EUROCRYPT 2013. *Jury member* of EESTEC competition for Android (2014, 2015).

Reviewing. Journals: Theoretical Computer Science, IEEE/ACM Transactions on Networking, Algorithmica, IEEE Transactions on Computers, Information Processing Letters, Information and Computation, Discrete Applied Mathematics etc. Conferences: ICALP, SODA, Sirocco, FCT, MFCS, ESA, etc. Guest Editor for TCS special issue 2017.

Research interests. Computational Complexity, Network Algorithms, Distributed Computing, Approximation Algorithms, Security and Cryptography. Most cited contributions: distributed protocols for ad-hoc networks, algorithms for optical networks optimization, computational complexity.

Invited talks. City University of New York, ETH Zuerich, University of Ulm, Schloss Dagstuhl, Université Paris-Sud (Orsay), University of Liverpool, Athens University of Economics and Business, University of Athens, Université Paris-Dauphine, Paris LIP6, USI Lugano, Lancaster, Liverpool, UCL, Ioannina.

Research visits. Long-term: ETH Zuerich, invited by Professor Peter Widmeyer (fully funded 6 month visits, 2000 and 2002), University of Rochester, invited by Professor Lane A. Hemaspaandra (1 month visit, Oct '09) Université Paris-Dauphine, invited by

Dr. Laurent Gourvès (fully funded 3 month visits 2012, 2013, 2016), King's College London, invited by Prof. Tomasz Radzik (sabbatical, 2015-16). Short-term funded visits: Ulm (2001, Prof. Uwe Schoening), Liverpool (2016, Prof. Leszek Gasieniec).

Funding. Recipient of EU, UK, Swiss, and national grants and scholarships. Senior researcher, basic research project Algorithms of Today/Thales, Greek Secretariat of Research and Technology, 2011-15 (coordinator: Stathis Zachos). Recipient of Kallipos grant for scientific e-books authoring (3 books, 2014-16).

Advising. Advisor or co-advisor for many Diploma and M.Sc. theses and for more ten PhD theses (four completed). PhD Advisees: Dimitris Sakavalas (graduated 2016, now post-doc Boston College), Evangelos Bampas (2009, co-advisor, now in American University of Paris), Dora Souliou (2006, co-advisor, now in NTU Athens), Katerina Potika (2004, co-advisor, now in San Jose SU).

Teaching. *Undergraduate courses.* Current: Cryptography, Algorithms and Complexity, Foundations of Computer Science, Advanced Algorithms, Programming Techniques. Past: Introduction to Programming, Introduction to Computer Science, Fortran and Object Oriented Programming.

Graduate courses. Current: Computational Cryptography, Algorithms and Complexity I, Network Algorithms and Complexity. Past: Approximation Algorithms, Parallel Algorithms, Advanced Cryptography and Complexity.

Selected Publications

I. Books

1. **Foundations of Informatics** (with E. Zachos, in Greek). Tsotras publications, 2014.
2. **Computational Cryptography** (with E. Zachos and P. Grontas). E-book (in Greek), Kallipos Publications, 2015. Available Online at: <http://hdl.handle.net/11419/5439>.
3. **Foundations of Computer Science** (with E. Zachos and Th. Souliou). E-book (in Greek), Kallipos Publications, 2015. Available Online at: <http://hdl.handle.net/11419/5452>.
4. **Algorithmic Theory of Distributed Computing** (with E. Markou, E. Kranakis, and D. Krizanc). E-book (in Greek), Kallipos Publications, 2015. Available Online at: <http://hdl.handle.net/11419/5769>.

II. Journals

1. Evangelos Bampas, Christina Karousatou, Aris Pagourtzis, Katerina Potika: **Minimum multiplicity edge coloring via orientation.** *Discrete Applied Mathematics* (to appear).
2. Evangelos Bampas, Christina Karousatou, Aris Pagourtzis, Katerina Potika: **Path Multicoloring in Spider Graphs with Even Color Multiplicity.** *Information Processing Letters* 133: 1-4 (2018).
3. E. Bampas, A.-N. Göbel, A. Pagourtzis, A. Tentes. **On the connection between interval size functions and path counting.** *Computational Complexity* 26(2): 421-467 (2017)

4. A. Pagourtzis, G. Panagiotakos, D. Sakavalas. **Reliable broadcast with respect to topology knowledge.** *Distributed Computing* 30(2): 87-102 (2017).
5. S. Karmakar, P. Koutris, A. Pagourtzis and D. Sakavalas. **Energy-Efficient Broadcasting in Ad Hoc Wireless Networks.** *Journal of Discrete Algorithms*, 42: 2-13 (2017).
6. E. Bampas, N. Leonardos, E. Markou, A. Pagourtzis, M. Petrolia. **Improved periodic data retrieval in asynchronous rings with a faulty host.** *Theoretical Computer Science* 608: 231-254 (2015).
7. E. Bampas, A. Pagourtzis, G. Pierrakos, and K. Potika. **On a non-cooperative model for wavelength assignment in multifiber optical networks.** *IEEE/ACM Transactions on Networking*, 20(4): 1125-1137, 2012.
8. E. Bampas, A. Pagourtzis, and K. Potika. **An experimental study of maximum profit wavelength assignment in WDM rings.** *Networks*, 57(3), pp. 285-293, 2011.
9. F. Coenen, P. Leng, A. Pagourtzis, D. Souliou and W. Rytter, **Improved Methods for Extracting Frequent Itemsets from Interim-Support Trees.** *Software: Practice and Experience*, 39(6), pp. 551-571, Wiley Interscience 2009.
10. M. Cieliebak, S. Eidenbenz, A. Pagourtzis, and K. Schlude. **On the Complexity of Variations of Equal Sum Subsets.** *Nordic Journal of Computing*, 14(3), pp. 151-172, 2008.
11. A. Pagourtzis, K. Potika, and S. Zachos. **Path multicoloring with fewer colors in spiders and caterpillars.** *Computing*, 80(3), pp. 255-274, Springer Wien, 2007.
12. L. Gasieniec, A. Pagourtzis, I. Potapov, and T. Radzik. **Deterministic Communication in Radio Networks with Large Labels.** *Algorithmica*, 47(1), pp. 97-117, Springer, 2007.
13. D. Souliou, A. Pagourtzis, N. Drosinos, and P. Tsanakas. **Computing Frequent Itemsets in Parallel using Partial Support Trees.** *Journal of Systems and Software*, 79(12), pp. 1735-1743, Elsevier Science, 2006.
14. C. Nomikos, A. Pagourtzis, K. Potika, and S. Zachos. **Routing and Wavelength Assignment in Multifiber WDM Networks with Non-Uniform Fiber Cost.** *Computer Networks*, 50(1), pp. 1-14, Elsevier Science, 2006.
15. C. Nomikos, A. Pagourtzis, and S. Zachos. **Satisfying a maximum number of pre-routed requests in all-optical rings.** *Computer Networks*, 42(1), σελ. 55-63, Elsevier Science, 2003.
16. A. Gibbons, A. Pagourtzis, I. Potapov and W. Rytter. **Coarse-Grained Parallel Transitive Closure Algorithm: Path Decomposition Technique.** *The Computer Journal*, 46(4), σελ. 391-400, Oxford University Press, 2003.
17. C. Nomikos, A. Pagourtzis, and S. Zachos. **Routing and Path Multi-Coloring.** *Information Processing Letters*, 80(5), σελ. 249-256, Elsevier Science, 2001.

II. Conferences (peer-reviewed)

1. Panagiotis Grontas, Aris Pagourtzis, Alexandros Zacharakis, Bingsheng Zhang. **Towards everlasting privacy and efficient coercion resistance in remote electronic voting.** In Proc. 3rd Workshop on Advances in Secure Electronic Voting (VOTING'18, Financial Cryptography and Data Security 2018 workshop), Curacao, March 2, 2018.

2. Aris Pagourtzis, Giorgos Panagiotakos, Dimitris Sakavalas. **Reliable Communication via Semilattice Properties of Partial Knowledge**. Proc. 21st Fundamentals of Computation Theory Symposium (FCT 2017), LNCS 10472: 367-380, Springer, 2017.
3. P. Grontas, A. Pagourtzis, A. Zacharakis. **Coercion Resistance in a Practical Secret Voting Scheme for Large Scale Elections**. Proc. ISPAN-FCST-ISCC 2017, pp. 514-519, IEEE Computer Society 2017.
4. Alexandros Zacharakis, Panagiotis Grontas, Aris Pagourtzis. **Conditional Blind Signatures**. International Conference on Algebraic Informatics, CAI 2017, Kalamata, Greece, June 25-28 2017.
5. E. Kranakis, D. Krizanc, E. Markou, A. Pagourtzis, F. Ramírez. **Different Speeds Suffice for Rendezvous of Two Agents on Arbitrary Graphs**. In Proc. of 43rd International Conference on Current Trends in Theory and Practice of Computer Science (SOFSEM 2017), vol. 10139 of LNCS, pp. 79-90, Springer, 2017.
6. Eleni Bakali, Aggeliki Chalki, Aris Pagourtzis, Petros Pantavos, Stathis Zachos. **Completeness Results for Counting Problems with Easy Decision**. Proc. CIAC 2017, LNCS 10236: 55-66, Springer, 2017.
7. Aris Pagourtzis, Giorgos Panagiotakos, Dimitris Sakavalas: **Reliable message transmission under partial knowledge and general adversaries** (brief announcement). In Proceedings of PODC 2016, Chicago, IL, USA, July 25-28, 2016, pages 203–205. ACM, 2016.
8. Christina Karousatou, Evangelos Bampas, Aris Pagourtzis, Katerina Potika: **Scheduling Connections via Path and Edge Multicoloring**. AdHocNow 2015.
9. Aris Pagourtzis, Giorgos Panagiotakos, Dimitris Sakavalas: **Reliable Broadcast with Respect to Topology Knowledge**. DISC 2014: 107-121.
10. Laurent Gourvès, Jérôme Monnot, Aris Pagourtzis: **The Lazy Matroid Problem**. IFIP TCS 2014: 66-77.
11. Evangelos Bampas, Nikos Leonardos, Euripides Markou, Aris Pagourtzis, Matoula Petrolia: **Improved Periodic Data Retrieval in Asynchronous Rings with a Faulty Host**. SIROCCO 2014: 355-370.
12. Chris Litsas, Aris Pagourtzis, Dimitris Sakavalas: **A Graph Parameter That Matches the Resilience of the Certified Propagation Algorithm**. ADHOC-NOW 2013: 269-280.
13. Evangelos Bampas, Aris Pagourtzis, George Pierrakos, Vasilis Syrgkanis: **Selfish Resource Allocation in Optical Networks**. CIAC 2013: 25-36.
14. Laurent Gourvès, Jérôme Monnot, Aris Pagourtzis: **The Lazy Bureaucrat Problem with Common Arrivals and Deadlines: Approximation and Mechanism Design**. FCT 2013: 171-182.
15. P. Koutris and A. Pagourtzis, **Oblivious k-shot broadcasting in ad hoc radio networks**. In Proceedings of the 17th Computing: The Australasian Theory Symposium (CATS 2011), Perth, Australia, January 2011, CPRIT, Vol. 119.
16. P. Koutris and A. Pagourtzis, **Brief announcement: k-shot distributed broadcasting in radio networks**. In Proceedings of the 29th ACM SIGACT-SIGOPS symposium on Principles of Distributed Computing (PODC 2010). ACM, New York, NY, USA, 77-78. DOI=10.1145/1835698.1835717.
17. E. Bampas, A.-N. Göbel, A. Pagourtzis, and A. Tentes, **On the connection between interval size functions and path counting**. In Proceedings of TAMC 2009 - 6th

- Annual Conference on Theory and Applications of Models of Computation, LNCS 5532, pp. 108-117. Springer-Verlag, Berlin Heidelberg, 2009.
18. E. Bampas, A. Pagourtzis, G. Pierrakos, and K. Potika, **On a non-cooperative model for wavelength assignment in multifiber optical networks**. In Proceedings of *ISAAC 2008* - 19th International Symposium on Algorithms and Computation, LNCS 5369, pp. 159-170. Springer-Verlag, Berlin Heidelberg, 2008.
 19. E. Bampas, A. Pagourtzis, and K. Potika, **“Maximum profit wavelength assignment in WDM rings (extended abstract)”**. In Proceedings of *CTW 2008* - 7th Cologne-Twente Workshop on Graphs and Combinatorial Optimization, pp. 35-38, 2008.
 20. C. Nomikos, A. Pagourtzis, and S. Zachos, **Randomized and Approximation Algorithms for Blue-Red Matching**, in Proceedings of 32nd International Symposium on Mathematical Foundations of Computer Science (*MFCS 2007*), to appear.
 21. I. Milis, A. Pagourtzis, and K. Potika, **Selfish Routing and Path Coloring in All-Optical Networks**, in Proceedings of 4th Workshop on Combinatorial and Algorithmic Aspects of Networking (*CAAN 2007*), Lecture Notes in Computer Science 4852, pp. 71-84, Springer-Verlag 2007.
 22. E. Bampas, G. Kaouri, M. Lampis, and A. Pagourtzis, **Periodic Metro Scheduling**, in Proceedings of the 6th Workshop on Algorithmic Methods and Models for Optimization of Railways (*ATMOS 2006*), Schloss Dagstuhl Research Online Publication Server (<http://drops.dagstuhl.de/opus/volltexte/2006/684/>).
 23. A. Pagourtzis, and S. Zachos, **The Complexity of Counting Functions with Easy Decision Version**, in Proceedings of 31st International Symposium on Mathematical Foundations of Computer Science (*MFCS 2006*), Lecture Notes in Computer Science 4162, pp. 741-752, Springer-Verlag 2006.
 24. I. Z. Emiris, E. Markou, and A. Pagourtzis, **Distributed Routing with Tree Networks with Few Landmarks**, in Proceedings of 3rd Workshop on Combinatorial and Algorithmic Aspects of Networking (*CAAN 2006*), July 2006, Chester, United Kingdom. Lecture Notes in Computer Science 4235, pp. 45-57, Springer-Verlag 2006.
 25. F. Coenen, P. Leng, A. Pagourtzis, D. Souliou and W. Rytter, **Techniques for Faster Generation of Frequent Itemsets Using Interim Support Trees**, in Proceedings of the 25th SGAI International Conference on Innovative Techniques and Applications of Artificial Intelligence (*AI 2005*), Dec 13 -- 14, pp. 263-276, Springer London.
 26. D. Souliou, A. Pagourtzis, and N. Drosinos, **Computing Frequent Itemsets in Parallel Using Partial Support Trees**, in *Proceedings of 10th European PVM/MPI Conference (Euro PVM/MPI 2005)*, Sep 18 – 21, 2005, Sorrento (Naples), Italy. Lecture Notes in Computer Science 3666, pp. 28-37, Springer-Verlag 2005.
 27. C. Nomikos, A. Pagourtzis, K. Potika, and S. Zachos, **Fiber Cost Reduction and Wavelength Minimization in Multifiber WDM Networks**, *Proceedings of the Third IFIP-TC6 Networking Conference (Networking 2004)*, Athens, Greece, May 9–14, 2004, Lecture Notes in Computer Science 3042, pp. 150–161, Springer-Verlag.
 28. S. Eidenbenz, A. Pagourtzis, and P. Widmayer, **“Flexible Train Rostering”**, *Proceedings of the 14th Annual International Symposium on Algorithms and Computation (ISAAC 2003)*, Kyoto, Japan, December 15-17, 2003, Lecture Notes in Computer Science 2906, pp. 615–624, Springer-Verlag.

29. T. Erlebach, A. Pagourtzis, E. Potika, and S. Stefanakos, **Resource Allocation Problems in Multifiber WDM Tree Networks**. *Proceedings of 29th Workshop on Graph Theoretic Concepts in Computer Science (WG 2003)*, Jun 19 – 21 2003, Elspeet Netherlands, Lecture Notes in Computer Science 2880, pp.218-229, Springer Verlag, 2003.
30. C. Nomikos, A. Pagourtzis, and S. Zachos, **Minimizing Request Blocking in All-Optical Rings**. *Proceedings of the 22nd Annual Joint Conference of the IEEE Computer and Communications Societies (IEEE INFOCOM 2003)*, Mar 30 – Apr 3 2003, San Francisco, CA, USA.
31. A. Pagourtzis, I. Potapov, and W. Rytter, **Observations on Parallel Computation of Transitive and Max-Closure Problems**. *Proceedings of 9th European PVM/MPI Conference (PVM/MPI 2002)*, Sep 29 – Oct 02, 2002, Linz, Austria, Lecture Notes in Computer Science 2474, pp. 217-225, Springer-Verlag.
32. L. Gasieniec, A. Pagourtzis, and I. Potapov, **Deterministic Communication in Radio Networks with Large Labels**. *Proceedings of 10th European Symposium on Algorithms (ESA 2002)*, Sep 17–21, 2002, Rome, Lecture Notes in Computer Science 2641, pp. 512-524, Springer-Verlag.
33. A. Pagourtzis, I. Potapov, and W. Rytter, **PVM Computation of the Transitive Closure: The Dependency Graph Approach**. *Proceedings of 8th European PVM/MPI Conference (PVM/MPI 2001)*, Santorini/Thera, Greece, September 23–26, 2001, Lecture Notes in Computer Science 2131, pp. 249–256, Springer-Verlag.
34. B. S. Chlebus, L. Gasieniec, A. Lingas, and A.T. Pagourtzis, **Oblivious Gossiping in ad-hoc Radio Networks**. *Proceedings of 5th Int. Workshop on Discrete Algorithms and Methods for Mobile Computing and Communications (DialM'2001)*, Rome, Italy, July 21, 2001, pp. 44–51, ACM Press, NY, 2001.
35. A. Kiayias, A. Pagourtzis, and S. Zachos, **Cook Reductions Blur Structural Differences Between Functional Complexity Classes**. *Proceedings of 2nd Panhellenic Logic Symposium (PLS '99)*, pp. 132-137, Delphi, Jul 13–17, 1999.