Ioannis Stavrakakis

2022-12

Professor of Informatics and Telecommunications
IEEE Fellow

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GENERAL

Education

- Five-year Diploma in Electrical Engineering, Aristotelian University of Thessaloniki, Greece, June 1983 (ranked first in the graduating class of 1983).
- Ph.D. in Electrical Engineering, University of Virginia, May 1988; Thesis: "Random Access Multi-user Communication Networks and Approximation of their Output Processes".

Main Employment History

- Professor, Department of Informatics University of Athens, Athens, Greece (2002 -)
- Department Chair and Professor, Department of Informatics University of Athens, Athens, Greece (2013-16); Dept. Vice-Chair (2010-2012); Dir. of Graduate Studies (2010-2013)
- Associate Professor, Department of Informatics University of Athens, Athens, Greece (1999 - 2002)
- Associate Professor, Department of Electrical and Computer Engineering, Northeastern University (NU), Boston, MA, USA (1994 – 1999; tenured in 1996).
- Assistant Professor, Department of Computer Science and Electrical Engineering, University of Vermont (UVM), Burlington, VT, USA (1988 – 1994); tenured and promoted to Associate Professor in 1994.
- Research Assistant, Communication Systems Laboratory, Department of Electrical Engineering, University of Virginia, Charlottesville, VA, USA (1984 – 1988).

Other Professional Experience

- Visiting professor of Politecnico di Torino (Awarded, 2/2019 – 7/2019).
- Visiting professor of UC3M (Awarded, UC3M/Santander Chair of Excellence, 3/2018 – 9/2018).
- Visiting professor of the University Carlos III de Madrid (UC3M) and IMDEA Networks Institute (Awarded, Chair of Excellence Comunidad de Madrid, 3/2017-2/2018),
- Mercator Fellow of the German Research Foundation-DFG (2017-2024)
- Visiting Professor, University of Trento (2/2004).
- Consultant for Mitre Corporation on the development of protocols for highly mobile networks with ad-hoc structure, 1997 – 98.
- Consultant for Mayflower Communications on traffic modeling for the ICO satellite system, 1996 – 97.
- National Technological University (NTU) Instructor, 1994 – 97.
- Visiting Scientist, CNUCE Institute of the Italian National Research Council (CNR), Pisa, Italy (May – July 1994).
- Visiting Scientist, Queen's University, Kingston, Canada (Aug. 1990).

Membership

- *IEEE Computer Society Education Award Selection Committee (2016)*

- *IEEE Computer Society Fellows Committee (2015)*

- *IEEE Fellow* (since 2007) (Institute of Electrical and Electronics Engineers: student member 1984-88, member 1988-93, senior member 1993 – 2006); IEEE Communications Society; IEEE Technical Committee on Computer Communications (TCCC);
- *Member of the Board of Trustees and member of the Scientific Advisory Board* of IMDEA Networks (National Research Institute of Spain), 2006-2010, 2010–2014 and 2014-2017; 2018 – present.
- *Member of the Scientific Advisory Board* of GRNET (Greek Research Network);
- Conference Coordinator, IEEE Technical Committee on Computer Communications (TCCC) [Elected officer, 7/97-7/99.]
- Chair of IFIP TC6.3 (2003-2008): International Federation for Information Processing (IFIP), Working Group WG6.3 on Performance of Communication Systems;
- National representative of IFIP Greek Computer and Telecommunications Society to IFIP-TC6, 2009 -);
- Greek Chamber of Professional Engineers (Professional License, 1983 -);
- IFIP Greek Computer and Telecommunications Society (ЕПΥ) (2008-);
- Vice Chair of Autonomic Communication Forum (2004 - 2006).

Honors and Awards

- Fellow of IEEE (Institute of Electrical and Electronics Engineers) since 2017.
- UC3M/Santander Chair of Excellence recipient, 3/2018 – 9/2018.
- Chair of Excellence Comunidad de Madrid recipient, 3/2017-2/2018.
- Visiting professorship of Politecnico di Torino, 2/2019 – 7/2019.
- Mercator Fellow (German Research Foundation – DFG), 2017 – 2020.
- National Greek Scholarships, 1979, 80,81, 82; highest grade among the graduating class of 1983.
- Research Assistantship, University of Virginia, 1984 – 1988.
- Panchiakon Scholarship Foundation "Pateras", 1984 – 1987.
- USA National Science Foundation Research Initiation Award, 1990.

Major Research Contributions

Research activities span over three decades and have focused on resource allocation protocols, stochastic traffic management and congestion control for communication networks (peer-to-peer, mobile, ad hoc, autonomic, delay tolerant, social and future Internet), with recent emphasis on human driven decision-making in distributed competitive environments and information-centric networking.

The contributions to "network traffic analysis and resource allocation methodologies", was recognized in 2007 by IEEE in granting the Fellow status. The major activities/ contributions are summarized below.

- (1980's): seminal characterization of output processes of complex (multi-user, random-access) networks and traffic merging and splitting network elements, based on limited state information modulating the output process.
- (1990's): innovative resource allocation analysis methodology, employing non-independent fictitious traffic flows to capture characteristics of a large class of complex, realistic scheduling strategies, which are then studied employing the introduced unified framework and exploiting available traffic analysis techniques.

- (1990's): Establishment of capacity of Time Division Multiple Access (TDMA) resource allocation mechanisms (supporting call admission control function in QoS-supporting wireless networking standards (IEEE-WLANs, IEEE-802.16, etc)) and deriving policies that deliver the achievable QoS; also incorporated diverse QoS and wireless channel errors.
- (2000's): seminal work in scalable routing for ad hoc, mobile networks. It was used to measure the scalability of several existing protocols and considered by Internet Task Force on Ad hoc Network Scalability group. It led to the development of HSLS protocol which outperformed existing ones for large networks and was the first (flat) protocol proven scalable with respect to network size. HSLS was used as baseline for several projects dealing with large networks for the US military (e.g. BBN's UDAAN, JavaLen, etc.) and was adopted by the MOBILEMAN EU project, as well as for private, open source, community wireless networks (Champaign-Urbana Community Wireless Network - CUWiN).
- (2000's): Establishment of capacity of Generalized Processor Sharing (GPS) scheduler by deriving the (provably) optimal service strategy; GPS schedulers are employed widely in today's Internet routers and switches.
- (2000's): Highly cited (especially today) work on information caching. Work on distributed selfish replication, presenting the first provably sustainable (mistreatment-free) strategy for cooperative caching.
- (2010's): a series of 3 IEEE transactions papers developed 3 distinct approaches to the content/service placement problem in distributed fashion with local topology and demand information. This work is becoming more important today as optimal resource/service placement is key to optimizing distributed resource engagement / service provision.
- (2010's): Forward-looking, pioneering work on decision making in competitive environments by departing from mainstream fully rational considerations and factoring in human-behavior driven bounded rationality. This inter-disciplinary work brought in understanding on how humans take decisions and assessed the goodness of such decisions.

PUBLICATIONS

Google Scholar citations: 4814 / h-index: 30
Scopus citations: 2572 / h-index: 21
Web of Science: 1397 / 1322 / h-index: 18

Journal Publications

1. I. Stavrakakis, D. Kazakos, "A limited Sensing Protocol for Multi-user Packet Radio Systems," *IEEE Transactions on Communications*, Vol. 37, No. 4, pp. 353-359, April 1989.
2. I. Stavrakakis, D. Kazakos, "Performance Analysis of a Star Topology of interconnected Networks under 2nd –order Markov Network Output Processes," *IEEE Transactions on Communications,* Vol. 38, No. 10, pp. pp. 1724-1731, Oct. 1990.
3. I. Stavrakakis, D. Kazakos, "On the Approximation of the Output Process of Multi-user Random Access Communication Networks," *IEEE Transactions on Communications*, Vol. 38, No. 2, pp. 172- 178, Feb. 1990.
4. I. Stavrakakis, "Efficient Modeling of Merging and Splitting Processes in Large Networking Structures," *IEEE Journal on selected Areas in Communications*, Vol. 9, No.8, pp. 1336-1347, Oct. 1991.
5. I. Stavrakakis, "Statistical Multiplexing under Non-i.i.d. Packet Arrival Processes and Different Priority Policies," *Performance Evaluation Journal*, North-Holland, Vol. 12, No.3, pp. 181-189, June 1991.

6. I. Stavrakakis, D. Kazakos, "Queuing behavior of Two Interconnected Buffers of a Packet Network with Application to the Evaluation of Packet Routing Policies," *International Journal of Digital and Analog Communication systems*, John Wiley and Sons, Vol. 4, pp. 249-260, 1991.

7. I. Stavrakakis, D. Kazakos, "A Multi-user Random Access Communication system for Users with Different Priorities," *IEEE Transactions on Communications*, Vol. 39, No. 11, pp. 1538-1541, Nov. 1991.

8. I. Stavrakakis, "Queuing Analysis of a Class of Star Interconnected Networks under Markov Modulated Output Process Modeling," *IEEE Transactions on Communications*, Vol. 40, No. 8, pp. 1345-1354, Aug. 1992.

9. I. Stavrakakis, "Traffic modeling for Packet Communication Networks," *International Journal of Digital and Analog Communication Systems,* John Wiley and Sons, Vol. 5, pp. 157-165, 1992.

10. R. Landry, I. Stavrakakis, "Queuing Study of a 3-Priority Policy with Distinct Service Strategies," *IEEE/ACM Transactions on Networking*, Vol. 1, No. 5, pp. 576-589, Oct. 1993.

11. I. Stavrakakis, "A Two-Server Queuing System with Periodic and Credit-Based Server Availabilities," *Annals of Operation Research,* issue on Methodologies for High Speed Networks, Vol. 49, pp. 79-100, 1994.

12. M Abdelaziz, I. Stavrakakis, "Some Optimal Traffic Regulation Schemes for ATM Networks: A Markov Decision Approach," *IEEE/ACM Transactions on Networking*, Vol. 2, No. 5, pp. 508-519, Oct. 1994.

13. I. Stavrakakis, S. Tsakiridou, "A Markov Service Policy with Application to the Queuing Study of a DQDB Station," *Computer Networks and ISDN Systems*, Vol. 26, No. 12, pp. 1503-1522, Sept. 1994.

14. I. Stavrakakis, "Delay Bounds on a Queuing System with Consistent Priorities," *IEEE Transactions on Communications,* Vol. 42, No. 2, pp. 615-624, Feb. 1994.

15. I. Stavrakakis, "Channel Assignment Under a Conflict-Free Allocation Policy," *IEEE Transactions on Communications*, Vol. 42, No. 2, pp. 466-476, Feb. 1994.

16. I. Stavrakakis, S. Tsakiridou, "Analysis of a Non-Gated Integrated Services TDM," *IEEE Transactions on Communications,* Vol. 43, No. 2, pp. 729-732, March 1995.

17. I. Stavrakakis, "Characterization and Multiplexing of Correlated Traffic from Sources with Different Time Constants," *Computer Communications Journal*, special issue on Enabling ATM Networks, Vol. 19, No. 13, pp. 1112-1123, Nov. 1996.

18. J. Capone, I. Stavrakakis, "Achievable QoS and Scheduling Policies for Integrated Services Wireless Networks," *Performance Evaluation Journal*, Vol. 27 & 28, pp. 347-365. Oct. 1996. [Also presented at the IFIP Performance '96 Conference. Oct. 7-11, 1996. Laussanne, Switzerland.]

19. S. Tsakiridou, I. Stavrakakis, "Mean Delay Analysis of a Statistical Multiplexer with Batch Arrival Processes – A Generalization to Viterbi's Formula," *Performance Evaluation Journal*, Vol. 25, No. 1, pp. 1-15, March 1996.

20. R. Landry, I. Stavrakakis, "Study of Delay Jitter With and Without Peak Rate Enforcement," *IEEE/ACM Transactions on Networking*, Vol. 5, No. 4, pp. 543-553, Aug.1997.

21. R. Landry, I. Stavrakakis, "Multiplexing ATM Traffic Streams with Time-Scale-Dependent Arrival Processes," *Computer Networks and ISDN Systems*, Vol. 29, pp. 293-313, 1997.

22. I. Stavrakakis, S. Tsakiridou, "Study of a Class of Partially Ordered Service Strategies for a System of Two Discrete-Time Queues," *Performance Evaluation Journal*, Vol. 29, pp. 15-33, 1997.

23. J. Capone, Stavrakakis, "Determining the Call Admission Region for Real-Time Heterogeneous Application in Wireless TDMA Networks," *IEEE Network Magazine*, Vol. 12, No. 2, pp. 38-47, March/April 1998.

24. T. Dag, I. Stavrakakis, "Evaluation of ABR Traffic Management under Various System Time Scales," *Computer Networks and ISDN Systems*, Vol. 29, pp. 2103-2177, 1998.

25. J. Capone, I. Stavrakakis, "Achievable QoS in an Interference/Resource-Limited Shared Wireless Channel," *IEEE Journal on Selected Areas in Communications*, Vol. 17, No. 11, pp. 2041-2051, Nov. 1999.

26. C. Santivanez, I. Stavrakakis, "Study of Various TDMA schemes for Wireless Networks in the presence of Deadlines and Overhead," *IEEE Journal on Selected Areas in Communications,* Vol. 17, No. 7, pp. 1284-1304, July 1999.

27. Z. Antoniou, I. Stavrakakis, "Scheduling Algorithms for Application-Level QoS Support of Continuous Media Stream," *European Transactions on Telecommunications*, Special issue on Architectures, Protocols and Quality of Service for the Internet of the Future, No. 3, pp. 245-261, May June 1999.

28. J. Capone, I. Stavrakakis, "Delivering QoS Requirements to Traffic with Diverse Delay Tolerances in a TDMA Environment," *IEEE/ACM Transactions on Networking*, Vol. 7, No. 1, pp. 75-87, Feb. 1999.

29. P. Balaouras, I. Stavrakakis, L. Merakos, "Potential and Limitations of a Teleteaching Environment based on H.323 Audio-Visual Communication Systems," *Computer Networks Journal,* pp. 945-958, Vo. 34, No. 6, Dec. 2000.

30. M. Conti, E. Gregori, I. Stavrakakis, "Impact of Temporal/Spatial Correlations on per Session Performance Measures: Single and Multiple Node case," *Performance Evaluation Journal*, pp. 83-116, Vol. 41, No. 2-3, July 2000.

31. I. Stavrakakis, G. Chen, "Study of a Scheduling Policy for Diversified Deadline-Based Quality-of-Service," *Performance Evaluation Journal*, pp. 37-62, Vol. 41, 2000.

32. S. Iatrou, I. Stavrakakis, "A Dynamic Regulation and Scheduling Scheme for Real Time Traffic Management," *IEEE/ACM Transactions on Networking*, Vol. 8, No. 1, pp.60-70, Feb. 2000.

33. M. Abdelaziz, I. Stavrakakis, "Adaptive Rate Control in High-Speed Networks: Performance Issues," *Computer Networks Journal*, pp. 363-382, Vol. 37, No. 3-4, Nov. 2001.

34. N. Laoutaris, I. Stavrakakis, "Intrastream Synchronization for Continuous Media Streams: A survey of Playout Schedulers," *IEEE Network Magazine*, Vol.16, No.3, May 2002.

35. Z. Antoniou, I. Stavrakakis, "An Efficient, Deadline Credit-based Transport for Prerecorded, Semi-Soft Continuous Media Applications," *IEEE/ACM Transactions on Networking*, Vol. 10, No. 5, pp. 630-643, 2002.

36. N. Laoutaris, I. Stavrakakis, "An Analytical Design of Optimal Playout Schedulers for Packet Video Receivers", *Computer Communications Journal*, Vol. 26, No. 4, March. 2003.

37. T. Dag, I. Stavrakakis, "Proactive Congestion Control for High Speed Networks," *Computer Networks Journal*, Computer Networks, Volume 43, Issue 6, 20 December 2003, Pages 761-775

38. N. Laoutaris, B. VanHoudt, I. Stavrakakis, "Optimization of a Packet Video Receiver under Different Levels of Delay Jitter: An Analytical Approach", *Performance Evaluation Journal*, Vol. 55, No. 3-4, pp. 251-275, Feb. 2004.

39. N. Laoutaris, V. Zissimopoulos, I. Stavrakakis, "Joint Object Placement and Node Dimensioning for Internet Content Distribution", *Information Processing Letters*, Vol. 89, No. 6, pp. 273-279, March 2004.

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41. P. Balaouras, I. Stavrakakis, "Controlling Smoothness and Loss Rate for Elastic Continuous Media Flows" *Computer Networks Journal*, Volume 45, Issue 3, 21 June 2004, Pages 363-378.

42. K. Oikonomou and I. Stavrakakis, "Analysis of a Probabilistic Topology-Unaware TDMA MAC Policy for Ad-Hoc Networks," *IEEE JSAC Special Issue on Quality-of-Service Delivery in Variable Topology Networks*, Vol. 22, No. 7, September 2004, pp. 1286-1300.

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44. N. Laoutaris, V. Zissimopoulos, I. Stavrakakis, "On the Optimization of Storage Capacity Allocation for Content Distribution", *Computer Networks Journal*, Vol. 47, No. 3, pp. 409-428, 2005.

45. P. Balaouras, I. Stavrakakis, "A Self-Adjusting Rate Adaptation Scheme with Good Fairness and Smoothness Properties", *Computer Networks Journal,* Vol.48, Issue 6, Aug. 2005, pp. 829-855

46. Konstantinos Oikonomou, Nikos Pronios and Ioannis Stavrakakis, "Performace Analysis of Topology-Unaware TDMA MAC Schemes for Ad-Hoc Networks with Topology Control," *Computer Communications Journal,* Vol. 28, Issue 3, Feb. 2005, pp 313-324.

47. K. Oikonomou, I. Stavrakakis, "Analysis of Topology-Unaware TDMA MAC Policies for Ad-Hoc Networks Under Diverse Traffic Loads", *ACM Mobile Computing and Communications Review,* special issue on Medium Access and Call Admission Control Algorithms for Next Generation Wireless Networks, October 2005, Vol. 9, pp. 25-38.

48. C. Xenakis, N. Laoutaris, L. Merakos, I. Stavrakakis, "A Generic Characterization of the Overheads Imposed by IPsec and Associated Cryptographic Algorithms," *Computer Network Journals,* Vol. 50, No. 17, pp. 3225-3241, 2006.

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51. N. Laoutaris, O. Telelis, V. Zissimopoulos, I. Stavrakakis, "Distributed Selfish Replication" *IEEE Transaction on Parallel and Distributed Systems*, vol. 17, no. 12, pp. 1401-1413, Dec., 2006.

52. K. Oikonomou and I. Stavrakakis, "Energy Consumption for Topology-Unaware TDMA MAC Protocols," *Ad-Hoc Networks Journal*, Ad-Hoc Networks Journal, Elsevier Science, Vol. 4, Iss. 3, May 2006, pp. 359-379.

53. G. Smaragdakis, N. Laoutaris, I. Matta, A. Bestavros, I. Stavrakakis, "Mistreatment-Resilient Distributed Caching", *Computer Network Journal*, Volume 51, Number 11, Aug. 2007.

54. N. Laoutaris, G. Smaragdakis, A. Bestavros, I. Matta, I. Stavrakakis, "Distributed Selfish Caching", *IEEE Transactions on Parallel and Distributed Systems*, Vol. 18, No. 10, Oct. 2007.

55. K. Oikonomou, I. Stavrakakis, "An Adaptive Time-Spread Multiple-Access Policy for Wireless Sensor Networks", *EURASIP Journal on Wireless Communications and Networking*, special issue on "Novel Techniques for Analysis & Design of Cross-Layer Optimized Wireless Sensor Networks", Article ID 64238, 8 pages, 2007.

56. A. Panagakis, A. Vaios, I. Stavrakakis, "Approximate Analysis of LRU in the Case of Short Term Correlations", *Computer Networks Journal*, 52, 6, Apr. 2008, 1142-1152.

57. Christos Xenakis, Christoforos Ntantogian, Ioannis Stavrakakis, "A network-assisted mobile VPN for securing users data in UMTS", *Computer Communications*, Elsevier Science, Vol. 31, Iss. 14, 5 Sept. 2008, Pages 3315-3327.

58. C. Vassilakis, N. Laoutaris, I. Stavrakakis, "On the Impact of Playout Scheduling on the Performance of Peer-to-Peer Live Streaming", *Computer Networks Journal*, Special Issue on "Content Distribution Infrastructures for Community Networks", vol.53 , issue 4, pages 456-469, Mar. 2009.

59. J. Antoniou, I. Koukoutsidis, E. Jaho, A. Pitsillides, I. Stavrakakis, "Access Network Synthesis Game in Next Generation Networks", *Computer Networks Journal,* Vol. 53, Iss. 15, pp. 2716-2726, Oct. 2009.

60. A. Panagakis, A. Vaios, I. Stavrakakis, "On the Performance of Two-Hop Message Spreading in DTNs", *Ad-Hoc Networks Journal*, Vol. 7, Iss. 6, pp. 1082-1096, Aug. 2009.

61. K. Oikonomou, I. Stavrakakis, "Scalable Service Migration in Autonomic Network Environments", special issue of *IEEE Journal on Selected Areas in Communications* (JSAC) on "Recent Advances in Autonomic Communications", Vol. 28, No. 1, pp. 84-94, Jan. 2010.

62. A. Vaios, K. Oikonomou, N. Zinelis, I. Stavrakakis, "Increasing Capacity in Dual-band WLANs through Ad-hoc Networking," *International Journal of Wireless and Mobile Computing (IJWMC),* Special Issue on Wireless Ad Hoc Networking, to appear (accepted in 2006).

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64. K. Oikonomou, D. Kogias, I. Stavrakakis, "Probabilistic Flooding for Efficient Information Dissemination in Random Graph Topologies", *Computer Networks Journal*, Vol. 54, Iss. 10 (July 2010), pp: 1615-1629, 2010.

65. L. Tzevelekas, K. Oikonomou, I. Stavrakakis, "Random Walk with Jumps in large-scale Geometric Random Graphs", *Computer Communications Journal*, Vol. 33, Iss. 13 (August 2010), pp. 1505-1514, 2010.

66. C. Vassilakis, I. Stavrakakis, "Minimizing Node Churn in Peer-to-Peer Streaming Computer Communications", *Computer Communications Journal*, Vol.33, Iss. 14, pp. 1598-1614, Sept. 2010.

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71. E. Kafetzakis, K. Kontovasilis, I. Stavrakakis, "A Novel Effective Capacity-Based Framework for Providing Statistical QoS Guarantees in IEEE 802.11 WLANs", *Computer Communications Journal*, Elsevier, vol. 35, Iss. 2, pp. 249-262, Jan 2012.

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89. Apostolos Demertzis, Konstantinos Oikonomou, Ioannis Stavrakakis, "Evaluation of a Proposed Minimum Path Impotence Routing Policy in Wireless Sensor Networks", *Ad Hoc Networks* Journal (Elsevier), Vol. 94, Nov. 2019.

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115. L. Tzevelekas, I. Stavrakakis, "Improving Partial Cover of Random Walks in Large Scale Wireless Sensor Networks", 3rd IEEE WoWMoM Workshop on Autonomic and Opportunistic Communications (AOC'09), 15 June 2009, Kos, Greece.

116. V. Manetti, R. Canonico, G. Ventre, I. Stavrakakis, " System-level Virtualization and Mobile IP to Support Service Mobility", Workshop on Design, Optimization and Management of Heterogeneous Networked Systems (DOM-HetNetS), in conjunction with the 38th Conference on Parallel Processing (ICPP), Sept 22-25, 2009, Vienna, Austria.

117. P. Pandazopoulos, I. Stavrakakis, A. Passarella, M. Conti, "Efficient Social-aware Content Placement for Opportunistic Networks", The Seventh International Conference on Wireless On-demand Network Systems and Services (IFIP/IEEE WONS), Feb. 3-5, 2010. Kranjska Gora, Slovenia.

118. K. Oikonomou, D. Kogias, I. Stavrakakis, "A Study of Information Dissemination Under Multiple Random Walkers and Replication Mechanisms", Second ACM/SIGMOBILE International Workshop on Mobile Opportunistic Networking (MobiOpp), Feb. 22-23, 2010, Pisa, Italy.

119. L. Tzevelekas, I. Stavrakakis, "Sink mobility schemes for data extraction in large scale WSNs under single or zero hop data forwarding", 16th European Wireless Conference, Apr. 12-15, 2010, Lucca, Italy.

120. E. Jaho, M. Karaliopoulos, I. Stavrakakis, "Social Similarity as a Driver for Selfish, Cooperative and Altruistic Behavior", 4th IEEE WoWMoM Workshop on Autonomic and Opportunistic Communications (AOC'10), June 14, 2010, Montreal.
121. C. Panos, C. Xenakis, I. Stavrakakis, "A novel intrusion detection system for MANETS", International Conference on Security and Cryptography (SECRYPT'10), July 26-28, 2010, Athens, Greece.
122. I. Manolopoulos, Kimon Kontovasilis, I. Stavrakakis, S. Thomopoulos, "MAD: A Dynamically Adjustable Hybrid Location and Motion-based Routing Protocol for VANETs", 7th International Symposium on Wireless Communication Systems (ISWCS'10), Sept 19-22, 2010, York, UK.
123. I. Stavrakakis, "Network Protocol Performance Bounding Exploiting Properties of Infinite Dimensional Linear Equations", IFIP PERFORM Workshop (Performance Evaluation of Computer and Communication Systems: Milestones and Future Challenges), Oct. 14-16, 2010, Univ. of Vienna, Vienna (post workshop publication in Springer LNCS).
124. E. Kokolaki, M. Karaliopoulos, I. Stavrakakis, "Value of information exposed: wireless networking solutions to the parking search problem", Eighth International Conference on Wireless On-demand Network Systems and Services (IFIP/IEEE WONS), Jan 26-28, 2011, Bardonecchia, Italy.
125. I. Stavrakakis, "Relevance and Cognition for Pervasive Computation at Scale", white paper in NSF Workshop on Pervasive Computing at Scale (PeCS), Jan. 27-28, 2011, Univ. of Washington, Seattle, USA.
126. E. Jaho, M. Karaliopoulos, I. Stavrakakis. ISCoDe: a framework for interest similarity-based community detection in social networks. Third International Workshop on Network Science for Communication Networks (INFOCOM-NetSciCom'11), Apr. 10-15, 2011, Shanghai.
127. C. Panos, C. Xenakis, I. Stavrakakis, "An Evaluation of Anomaly-based Intrusion Detection Engines for Mobile Ad Hoc Networks ," In Proc. 8th International Conference on Trust, Privacy & Security in Digital Business (TrustBus 2011), Aug. 29 – Sept. 2, 2011, Toulouse France.
128. P. Pandazopoulos, M. Karaliopoulos, I. Stavrakakis, "Centrality-driven scalable service migration", 23rd International Teletraffic Congress (ITC), Sept. 6-9, 2011, San Francisco, USA.
129. P. Nikolopoulos, T. Papadimitriou, P. Pantazopoulos, M. Karaliopoulos, I. Stavrakakis, "How Much off-center Are Centrality Metrics for Routing in Opportunistic Networks", ACM MobiCom 2011 Workshop on Challenged Networks (CHANTS'11) September 23, 2011, Las Vegas, Nevada, USA.
130. M. Karaliopoulos, P. Pantazopoulos, E. Jaho, I. Stavrakakis, "Trace-driven Analysis of Data Forwarding in Opportunistic Networks", Second conference on the Analysis of Mobile Phone Datasets and Networks (NetMob 2011), October 10-11, 2011 MIT (Media Lab), Cambridge, MA, USA.
131. C. Panos, P Kotzias, C. Xenakis, I. Stavrakakis, "Securing the 802.11 MAC in MANETs: A Specification-based Intrusion Detection Engine," 9th International Conference on Wireless On-demand Network Systems and Services ((IFIP/IEEE WONS), Jan. 9-11, 2012, Courmayeur, Italy.
132. C. Ntantogian, C. Xenakis, I. Stavrakakis, "Analysis and Modeling of False Synchronizations in 3G-WLAN Integrated Networks," In Proc. 27th IFIP International Information Security and Privacy Conference (SEC 2012), June 4-6, 2012, Heraklion, Crete, Greece.
133. I. Manolopoulos, K. Kontovasilis, I. Stavrakakis, S. Thomopoulos, "Exploiting Topology and Behavioural Attributes for Effective Routing in Mobile Networks", 10th Conference on Wireless On-demand Network Systems and Services ((IFIP/IEEE WONS'13), March 18-20, 2013, Banff, CA.
134. E. Kokolaki, G. Kollias, M. Papadaki, M. Karaliopoulos, I. Stavrakakis, "Opportunistically-assisted parking search: a story of free riders, selfish liars and bona fide mules", 10th Conference on Wireless On-demand Network Systems and Services ((IFIP/IEEE WONS'13), March 18-20, 2013, Banff, CA.
135. E. Kokolaki, M. Karaliopoulos, I Stavrakakis, "On the human-driven decision-making process in competitive environments", Internet Science Conference, April 10-11, 2013, Brussels. **Best student paper award - Special Award mention**.
136. P. Pandazopoulos, M. Karaliopoulos, I. Stavrakakis, "On the Local Approximations of Node Centrality in Internet Router-level Topologies", 7th Workshop on Self-Organizing Systems (IWSOS 2013), May 9-10, 2013, Palma de Mallorca.
137. E. Kokolaki, M. Karaliopoulos, I. Stavrakakis, "On the efficiency of information-assisted search for parking space: a game-theoretic approach", 7th Workshop on Self-Organizing Systems (IWSOS 2013), May 9-10, 2013, Palma de Mallorca.
138. E. Kokolaki, M. Karaliopoulos, I. Stavrakakis, "Parking assisting applications: effectiveness and side-issues in managing public goods", 3rd AWARE workshop on Challenges for Achieving Self-Awareness in

Autonomic Systems of the Self-Adaptive and Self-Organizing systems conference (SASO 2013), Sept. 9-13, 2013, Philadelphia, USA.

139. E. Kokolaki, I. Stavrakakis, "Equilibrium analysis in the parking search game with heuristic strategies", 2nd Workshop on Vehicular Traffic Management for Smart Cities (VTM), of the 79th IEEE Vehicular Technology Conference (VTC), 18-21 May 2014, Seoul, Korea.

140. E. Kokolaki, M. Karaliopoulos, I. Stavrakakis, "Trading public parking space", IEEE WoWMoM workshop on Smart Vehicles, June 16-19, 2014, Sydney, Australia.

141. G. Nomikos, P. Pantazopoulos, M. Karaliopoulos, I. Stavrakakis, 'Comparative Assessment of Centrality Indices and Implications on the Vulnerability of ISP Networks", 26th Int. Teletraffic Congress (ITC), Sept. 9-11, 2014, Karlskrona, Sweden.

142. Franco Bagnoli, Andrea Guazzini, Giovanna Pacini, Ioannis Stavrakakis, Evangelia Kokolaki, George Theodorakopoulos, "Cognitive Structure of Collective Awareness Platforms", 2nd workshop on Self-Adaptive and Self-Organising Socio-Technical Systems (SASO^ST) of the Eighth IEEE International Conference on Self-Adaptive and Self-Organizing Systems (SASO 2014), Sept. 8-12, 2014, London, UK

143. I. Stavrakakis, E. Kokolaki, "Managing competition for (public) resources in human-centric networked environments", International Conference on Computing, Networking and Communications (ICNC 2015), Feb. 16-19, 2015, Anaheim, California, USA. (invited presentation/paper)

144. P. Pantazopoulos, I. Stavrakakis, "Low-cost Enhancement of the Intra-domain Internet Robustness Against Intelligent Node Attacks", The 11th International Conference on Design of Reliable Communication Networks (IEEE/IFIP DRCN), March 24-27, 2015, Kansas City, Missouri, USA.

145. I. Deli, I. Stavrakakis, "Distributed Proactive Caching in a Group of Selfish Nodes", 13th Conference on Wireless On-demand Network Systems and Services (IEEE/IFIP WONS'17), Feb. 21-24, 2017, Jackson Hole, Wyoming, USA.

146. V. Dragonas, K. Oikonomou, I. Stavrakakis, "A Topology-Independent TDMA MAC Policy for Safety Applications in Vehicular Networks", First International Balkan Conference on Communications and Networking (BalkanCom'17), May 30- June 2, 2017, Tirana, Albania.

147. T. Rueckelt, I. Stavrakakis, T. Meuser, D. Bohnstedt, R. Steinmetz, "Data Transmission Plan Adaptation for Connected Vehicles", First International Balkan Conference on Communications and Networking (BalkanCom'17), May 30- June 2, 2017, Tirana, Albania.

148. G. Tsoumanis, K. Oikonomou, S. Aissa, I. Stavrakakis, "Recharging Vehicle Distance Minimization in Wireless Sensor Networks", First International Balkan Conference on Communications and Networking (BalkanCom'17), May 30- June 2, 2017, Tirana, Albania.

149. N. Richerzhagen, P. Lieser, B. Richerzhagen, B. Koldehofe, I. Stavrakakis, R. Steinmetz, "Change as Chance: Transition-enabled Monitoring for Dynamic Networks and Environments", 14th Conference on Wireless On-demand Network Systems and Services (IEEE/IFIP WONS'18), Feb. 6-8, 2018, Isola 2000, France.

150. T. Meuser, B. Richerzhagen, I. Stavrakakis, T.A.B. Nguyen, R. Steinmetz, "Relevance-Aware Information Dissemination in Vehicular Networks", IEEE WoWMoM'18 conference, poster, June 12-15, 2018, Chania, Greece.

151. G. Tsoumanis, K. Oikonomou, S. Aissa, I. Stavrakakis, "Performance Evaluation of a Proposed On-Demand Recharging Policy in Wireless Sensor Networks", IEEE WoWMoM'18 conference, June 12-15, 2018, Chania, Greece.

152. N. Richerzhagen, R. Klugez, B. Richerzhagen, P. Lieser, B. Koldehofe, I. Stavrakakis, R. Steinmetz, "Better Together: Collaborative Monitoring for Location-based Services", IEEE WoWMoM'18 conference, June 12-15, 2018, Chania, Greece.

153. G. Koufoudakis, K. Oikonomou, S. Aissa, I. Stavrakakis, "Analysis of Spectral Properties for Efficient Coverage Under Probabilistic Flooding", IEEE WoWMoM'18 conference, June 12-15, 2018, Chania, Greece.

154. K. Skiadopoulos, K. Giannakis, K. Oikonomou, I. Stavrakakis, "Analysis of Multiple Random Walkers for Service Discovery in Fog Computing Network Environments", Second International Balkan Conference on Communications and Networking (BalkanCom'18), June 6 – 8, 2018, Podgorica, Montenegro.

155. S. Fanarioti, A. Tsipis, K. Giannakis, G. Koufoudakis, E. Christopoulou, K. Oikonomou, I. Stavrakakis, "A Proposed Algorithm for Data Measurements Synchronization in Wireless Sensor Networks", Second International Balkan Conference on Communications and Networking (BalkanCom'18), June 6 – 8, 2018, Podgorica, Montenegro.

156. A. Demertzis, K. Oikonomou, I. Stavrakakis, "An Adjustable Forwarding Policy Exploiting Path Vulnerability in Wireless Sensor Networks", Second International Balkan Conference on Communications and Networking (BalkanCom'18), June 6 – 8, 2018, Podgorica, Montenegro.

157. K. Skiadopoulos, K. Giannakis, K. Oikonomou, I. Stavrakakis, S. Aïssa, "Distributed Construction of d-hop Connected Dominating Sets for Wireless Sensor Networks", IEEE Global Communications Conference, Ad Hoc and Sensor Networks Symposium (AHSN), 9-13 Dec. 2018, Abu Dhabi, UAE.

158. K. Skiadopoulos, K. Giannakis, K. Oikonomou, I. Stavrakakis, S. Fanarioti, "A Distributed Method to Organize Terrestrial Nodes to Facilitate Short Drone Routes in WSNs", Third International Balkan Conference on Communications and Networking (BALKANCOM'19), June 10-12, 2019, Skopje, North Macedonia.

159. A. Papamichail, V. Dragonas, G. Koufoudakis, K. Oikonomou, G. Tsoumanis, I. Stavrakakis, "Low-cost Device Implementation of a Topology Independent MAC (TiMAC) Policy", Third International Balkan Conference on Communications and Networking (BALKANCOM'19), June 10-12, 2019, Skopje, North Macedonia.

160. A. Tsipis, K. Oikonomou, V. Komianos, I. Stavrakakis, "Performance Evaluation in Cloud-Edge Hybrid Gaming Systems", Third International Balkan Conference on Communications and Networking (BALKANCOM'19), June 10-12, 2019, Skopje, North Macedonia.

161. Francesco Malandrino, Cristina E.M. Rottondi, Carla Fabiana Chiasserini, Andrea Bianco, Ioannis Stavrakakis, "Managing Post-Disaster Scenarios via Multiservice UAVs", ACM MobiHoc Workshop on innovative aerial communication solutions for FIrst REsponders network in emergency scenarios (iFIRE'19), July 2, 2019, Catania, Italy.

162. Tobias Meuser, Ioannis Stavrakakis, Antonio Fernández Anta. "Dynamic Vehicle Path-Planning in the Presence of Traffic Events", 44th IEEE Conference on Local Computer Networks (LCN), Oct. 14-17, 2019, Osnabrück, Germany.

163. A. Tsipis, K. Oikonomou, V. Komianos, I. Stavrakakis. "QoE-Aware Rendering Service Allocation in Fog-Assisted Cloud Gaming Environments", 5th South-East Europe Design Automation, Computer Engineering, Computer Networks and Social Media Conference (SEEDA-CECNSM), 2020, Corfu, Greece.

164. A. Tsipis, V. Komianos, K. Oikonomou, I. Stavrakakis. "Elastic Distributed Rendering Service Placement in Capacitated Cloud/Fog Gaming Systems". In: 2020 11th International Conference on Information, Intelligence, Systems and Applications (IISA) (Piraeus, Greece). 2020.

165. Tobias Meuser, Oluwasegun Taiwo Ojo, Daniel Bischo, Antonio Fernandez Anta, Ioannis Stavrakakis, Ralf Steinmetz, "Hide Me: Enabling Location Privacy in Heterogeneous Vehicular Networks", in LNCS 12129 (Networked Systems: 8th International Conference on NETworked sYStems (NETSYS), June 3-5, 2020 Marrakech, Marocco -virtual), 2021.

166. E. Stai, E. Kokolaki, L. Mitridati, P. Tatoulis, I. Stavrakakis, G. Hug, "Game-Theoretic Energy Source Allocation Mechanism in Smart-Grids", ENERGYCON, May 9-12, 2022, Riga, Latvia.

167. N. Koursioumpas, L. Magoula, S. Barmpounakis, I. Stavrakakis "Network Traffic Anomaly Prediction for Beyond 5G Networks", 2022 IEEE 33rd Annual International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC) , Sept. 12-15, 2022, virtual.

Book chapters

1. I. Stavrakakis, "Some distributed approaches to the service facility location problem in dynamic and complex networks", Handbook of Optimization in Complex Networks: Vol. 1 (Theory and Applications)

and Vol. 2 (Communication and Social Networks), edited by Profs. My T. Thai and Panos Pardalos, Springer Publisher, fall 2011.

2. P. Balaouras, I. Stavrakakis, "Multimedia Transport Protocols for Wireless Networks", chapter in "Emerging Wireless Multimedia: Services & Technologies", ed.: N. Passas, A. Salkintzis, J. Wiley, 2005.

3. G. Karlsson (Ed.), J. Roberts (Ed.), I. Stavrakakis (Ed.), A. Alves, S. Avellone, F. Boavida, S. D'Antonio, M. Esposito, V. Fodor, M. Gargiulo, J. Harju, Y. Koucheryavy, F. Li, I. Marsh, I. Mas Ivars, D. Moltchanov, E. Monteiro, A. Panagakis, A. Pescape, G. Quadros, S. P. Romano, G. Ventre, "Traffic Management", in Michael Smirnov et al. (Eds.), Quality of Future Internet Services - COST Action 263 Final Report, Lecture Notes in Computer Science, Vol. 2856, p 10-79, Springer-Verlag, Heidelberg, Germany, 2003.

Other Publications

1. Invited article on "Competition Awareness: Understanding decision-making in competitive environments providesuseful insight into the dynamics of agent behavior", Awareness Magazine, http://www.awareness-mag.eu/view.php?article=005211-2013-12-18&category=situational+awareness, Dec 2013

2. Invited article with title "Convergence in Telecommunications: a perspective through the past and the future trends", Special Issue on Convergence in Telecommunications, The Greek Economist – Kathimerini Magazine, No. 35, Jan. 2007

Workshop / Panel / Keynote /Research Forum Presentations (no proceedings)

1. I. Stavrakakis, "Decision Making for Uncoordinated User Access to Limited Distributed Resources", Keynote Talk, International Conference on Computer Communications Networks (ICCCN), (http://www.icccn.org), Athens, Greece, July 19-22, 2021.

2. I. Stavrakakis, "Adaptive Message Routing and Information Acquisition in Dynamic Mobile Networking Environments", Seventh Nordic Workshop on System & Network Optimization for Wireless (SNOW), Jan 17-19, 2016, Cortina D'Ampezzo, Italy.

3. I. Stavrakakis, "The Social Layer in Resource Competition", First International Conference on Engineering and Natural Science, May 15-19, 2015, Skopje, FYROM (invited speaker).

4. I. Stavrakakis, "Resolving Resource Competition in Smart Environments: From Anarchy and Games to Mobile Application-enabled Coordination", Sixth Nordic Workshop on System & Network Optimization for Wireless (SNOW), 18-20 March 2015, Geilo, Norway.

5. I. Stavrakakis, "Managing competition for (public) resources in human-centric networked environments", invited talk at the International Conference on Computing, Networking and Communications (ICNC 2015), Feb. 16-19, 2015, Anaheim, California, USA. http://www.conf-icnc.org/2015/ (invited speaker).

6. I. Stavrakakis, "Managing competition for (public) resources: Decision-making and some congestion cost cutting approaches", keynote talk at the Fifth International Conference on Information, Intelligence, Systems and Applications (IISA'14), July 8, 2014, Chania, Crete, Greece.

7. I. Stavrakakis, "The Human Layer in Decision-Making in Networked Environments", keynote talk at the IEEE International Conference on Computer, Information, and Telecommunication Systems (CITS 2013), May 7-8, 2013, Piraeus, Greece. http://atc.udg.edu/CITS2013/#keynotes

8. I. Stavrakakis, "The Human Layer in Decision-Making in Networked Environments", invited talk at the Workshop on DTN communications, Electrical & Computer Engineering Dept., Democritus University, June 18, 2013, Xanthi, Greece.

9. Ioannis Stavrakakis, "Towards Internet Science: EINS initiative and work on socio-tech driven content management and decision making", 26th workshop of Technical Committee on Computer Communications (TCCC), Nov. 7-9, 2012, Sedona, AZ, USA http://www.cs.arizona.edu/~bzhang/CCW2012/slides/stavrakakis.pdf

10. I. Stavrakakis, "Exploiting Social Metrics in Content Distribution", keynote talk at the IEEE Symposium on Computers and Communications (ISCC 2011), June 28-July 1, Corfu. http://www.ieee-iscc.org/2011/speakers.htm

11. I. Stavrakakis, "How much can social metrics actually help in content distribution?" Internet Science Workshop, June 18, 2011, IMDEA Networks, Madrid. (Invited presentation) http://events.networks.imdea.org/content/workshop-2011/program

12. I. Stavrakakis, "Exploiting the Social Layer in Content Placement and Distribution", 4th IEEE Workshop on Enabling the Future Service-Oriented Internet: Towards Socially-Aware Networks, in conjunction with IEEE GLOBECOM 2010, Miami, USA, December 6, 2010 (Invited Featured Talk). http://www.nprg.ncsu.edu/events/EFSOI/workshop10/

13. I. Stavrakakis, "Autonomicity and Behavioural Drivers (or optimizing the socio-tech layers) in Content Distribution", 1st Nordic Workshop on Cross-Layer Optimization in Wireless Networks, April 7-9, 2010, Levi-Lapland, Finland.

14. I. Stavrakakis, "Autonomicity and Relevance: Drivers of Future (Content) Networking "Science"", in the context of the panel "From Computer Communication Networks to Socio-technical Networks – Network Science in Communication Network Design", INFOCOM Network Science Wkshp (NetSciCom'10), March 19, 2010, San Diego, USA. http://netscicom2010.engineering.asu.edu/program.html

15. I. Stavrakakis, "Autonomicity and Behavioural drivers of the Future Internet", in the context of the panel on Future Internet, held at the 3rd IEEE Workshop on Enabling the Future Service-Oriented Internet: Towards Socially-Aware Networks, in conjunction with IEEE GLOBECOM 2009, Honolulu, HI, USA, December 4, 2009. http://www.nprg.ncsu.edu/events/EFSOI/workshop09/program.htm

16. I. Stavrakakis, "The Internet of the Future", presentation in session "WP Objective 1.1, WP 2009-2010: Network of the Future", ICT'2008, Nov 25-27, 2008, Lyon. **[invited]** http://ec.europa.eu/information_society/events/cf/item-display.cfm?id=852

17. I. Stavrakakis, "Designing for SCALP: Small Contributions of Autonomic Large Populations", COST/NSF Workshop on Future Internet, April 19-20, 2007, Berlin.**[invited]**

18. I. Stavrakakis, "Self-preservation in Autonomic Networking: Blending and Balancing selfishness and Cooperation", BIGG Workshop, Nov 28-29, 2006, Sophia-Antipolis, France **[invited]**

19. I. Stavrakakis, "Towards a New Information Moving Infrastructure: Challenges and Paradigms", Korea Conference on Innovative Science and Technology (KCIST): Internet of the Future, July 20-22, 2006, Seoul, Korea. **[invited]**

20. I. Stavrakakis, "Will Autonomicity Reduce Network Management Complexity?", Second IFIP Workshop on Autonomic Comunications (WAC2005), Oct. 3-5, Vouliagmeni-Athens, Greece. **[invited panel presentation]**

21. I. Stavrakakis, "Autonomic Networks: New Ideas and Challenges for the Research Community", IFIP Networking 2005 Conference, May 2-6, 2005, Waterloo, Canada. **[invited panel presentation]**

22. I. Stavrakakis, "Is Autonomic Communication the Networking Paradigm for the future?", Second Working Conference on Wireless On-demand Network Systems (WONS'05), Jan 19-21, 2005, St. Moritz. **[invited panel presentation]**

23. I. Stavrakakis, "Looking into the Crystal Ball of Networking - What is Next in Networking", IEEE ICNP2003, Nov. 4-7, 2003, Atlanta. **[invited panel presentation]**

24. I. Stavrakakis, A. Vaios, "The Broadway project: the way to broadband access at 60 GHz", European Science Foundation supported Exploratory Workshop "Is Mobile Ad Hoc Networking part of the future of mobile networking in Europe?", October 10-12, 2002, Monterosso al Mare – La Spezia, Italy. **[invited]**

25. A. Vaios, I. Stavrakakis, "Ad hoc routing extensions in WLANS", European Science Foundation supported Exploratory Workshop "Is Mobile Ad Hoc Networking part of the future of mobile networking in Europe?", October 10-12, 2002, Monterosso al Mare – La Spezia, Italy. **[invited]**

26. I. Stavrakakis, P. Balaouras, "Rate Adaptable Continuous Media Transmission over IP", COST263 meeting (Quality of future Internet Services), June 5, 2001, Karlsruhe, Germany.

27. I. Stavrakakis, "Toward a New Paradigm for "Real Time" Networking", International Workshop on High Speed Networking, May 21-24, 2000, Balatonfured, Hungary. **[invited]**

28. I. Stavrakakis, "Memory, a Promising Vehicle for Quality "Real Time" Networking", USA NSF sponsored Workshop on Network Quality Engineering, Feb. 25-26, 2000, ASU, Phoenix, AZ, USA. [**invited panel presentation**]
29. I. Stavrakakis, Z. Antoniou, "Efficient Transport of Soft Real-Time Applications", 1999 IFIP WG6.3 Workshop, Aug. 29, Sept. 1, 1999, Rethymnon, Greece.
30. I. Stavrakakis, J. Capone, "On the Achievability of Diversified QoS Vectors" Second Workshop of the IFIP TC6a WG6.3 on the Performance of Communication Systems, Oct. 13-14, 1996, Balatonfured, Hungary.
31. J. Capone, I. Stavrakakis, "Delivering Diverse Delay/Dropping QoS Requirements in a TDMA Environment", ITC Mini-Seminar on Performance Modeling and Design of Wireless/PCS Networks, Oct. 3, 1996, Boston, MA.
32. I. Stavrakakis, "Study of Some Rate Control and Buffer Management Schemes: Optimality and Fairness", First Workshop of the IFIP TC6 Task Force on the Performance of Communication Systems, Jan. 23-24, 1995, St. Thomas.
33. I. Stavrakakis, "Traffic Modeling and Regulation (Shaping) for High-Speed Networks", Non-Linear Optics Communication Mountain Workshop, April 12-13, 1994, Breckenridge, CO.
34. I. Stavrakakis, "Traffic Modeling and Regulation (Shaping) for High-Speed Networks", Non-Linear Optics Communication Mountain Workshop, April 12-13, 1994, Breckenridge, CO.
35. I. Stavrakakis, "Toward a Relief-Based Design of Congestion Avoidance Mechanisms for ATM", TRIO Workshop, Aug. 31, 1993, Queen's University, Kingston, Ontario. **[invited]**
36. I. Stavrakakis, "A Recursive Equations Approach to Counting (Rare) Events in Communication Networks", IEEE International Workshop on Computer-Aided Modeling, Analysis and Design of Communication Links and Networks, Sept. 29 – Oct.2, 1992, Montebello, Quebec.
37. I. Stavrakakis, "Effective modeling for Traffic Processes and Resource Allocation Policies in Packet Communication Networks", 21st Annual IEEE Communication Theory Workshop, June 1991, Rhodes, Greece.

Recent Seminars

1. Ioannis Stavrakakis, "Accessing Resources in (city-wide) Networked Environments: Issues and Alternatives", Nov. 6, 2017 - XVII Semana de la Ciencia, IMDEA Networks Institute, Leganés, Madrid. https://www.networks.imdea.org/whats-new/events/2017/accessing-resources-city-wide-networked-environments-issues-and-alternatives

2. Ioannis Stavrakakis, "Human-driven Decision-making in Accessing Distributed Resources", Distinguished Lecture Series Seminar, German Research Foundation-DFG MAKI centre, June 29, 2017, Technical University of Darmstadt, Germany.

3. I. Stavrakakis, "Resource Competition in a Highly Networked World of Humans and Things", Technical University of Darmstadt, Feb. 3, 2016, Darmstadt, Germany.

4. I. Stavrakakis, "Managing competition for (public) resources: Decision-making and some congestion cost cutting approaches", Nov. 17, 2014, Rice University, Houston, USA.

5. I. Stavrakakis, "Managing competition for (public) resources: Decision-making and some congestion cost cutting approaches", Nov. 14, 2014, Georgia Institute of Technology, Atlanta, USA.

6. I. Stavrakakis, "Social layer-driven content management and resource allocation", Arizona State University, Nov. 6, 2012, Phoenix, AZ, USA.

7. I. Stavrakakis, "Network Resource Allocation: From bandwidth and storage allocation (80's, 90's) to networked content management (90's, 00's) to exploiting social layer (late 00's - present)", INRIA, Feb. 14, 2012, S. Antipolis.

8. I. Stavrakakis, "Exploiting the social layer in content placement and distribution", seminar, Delft University, Sept. 21, 2010, Delft

9. I. Stavrakakis, "Autonomic Content Networking", Seminar at the Department of Electrical and Computer Engineering, Univ. of Arizona, Tucson, USA, April 10, 2008

10. I. Stavrakakis, "Telecom Convergence and Autonomic Networking", Ionian University of Greece, March 14, 2007, Corfu.

11. I. Stavrakakis, "Distributed Selfish Replication/Caching for Content Networks", KAIST Seminar Series, July 19, 2006, KAIST, Korea.

12. I. Stavrakakis, "Content Distribution through Autonomic Content and Storage Management: Distributed Selfish Replication Example", seminar, University of Cyprus, Oct. 13, 2006, Cyprus.

13. I. Stavrakakis, "Content Distribution through Autonomic Content and Storage Management: Distributed Selfish Replication Example", seminar, Delft University, Sept. 23, 2005, Delft.

14. I. Stavrakakis, "On Multi-Hop Extensions of WLANs: Trade-offs and Insights", seminar, KTH, Sweden, March 5, 2004.

Future Research Direction/Funding Forum Participation / Presentations

1. I. Stavrakakis, "Distributed Proactive Caching in a Group of Selfish Nodes", Politecnico di Torino, Feb. 20, 2019, Torino, Italy.

2. I. Stavrakakis, "Towards a science of (user, resource and information/service) interactions", Networking Session "Internet Science: Understanding the Future of Internet and Society", ICT 2010, Sept. 29, 2010, Brussels.

3. Panelist in the "Broadband Forum Panel", 3rd Broadband Networks and Services: "Innovation in Broadband Networks and Services", June 6-8, 2008, Grand Resort Lagonissi, Athens, Greece. http://www.eett.gr/conference2008/html/programme-eng.htm

4. Coordinator and speaker in the panel on "Digital Content and Internet Applications", Broadband Forum Workshop, Feb. 26, 2008, Caravel Hotel, Athens.

5. Coordinator of the EETT (Greek National Telecommunications Authority) Working Group on "Digital Content and Internet Applications", June 2007 – June 2008.

6. I. Stavrakakis, "Feedback from the Consultation Meeting "Internet of the Future" 31.1.2008", Consultation meeting on Future Internet Research and Experimentation (FIRE), Feb. 12, 2008, Brussels

7. Information day on the "Future of Internet", Jan. 31, 2008, Brussels (rapporteur)

8. I. Stavrakakis, "Content- and multi-resource –centric Networking – The Disappearing Communications Network", Presentation at the "Shaping Future FET Proactive Initiatives Workshop", Sept. 20-21, 2007, Brussels.

9. Scientific FIRE Preparatory Group meeting, April 24-25, 2007, Brussels.

10. Situated and Autonomic Communications (SAC) and Scientific FIRE Preparatory Group meeting, March 6-7, 2007, Zurich

11. I. Stavrakakis, "Dissecting the Initiative", FIRE Scientific Group meeting, Feb 14-15, 2007, Brussels http://www.panlab.net/fileadmin/documents/FIRE/20070214-stat20_en.pdf

12. Information day on the "Future of Internet", Dec. 15, 2006, Brussels (rapporteur and booklet editor)

13. Round Table Discussion: Communication Networks of the Future Organized by the European Commission DG INFSO "Communication technologies", Brussels, http://cordis.europa.eu/ist/ct/neweve/pubs-reports.htm#2006, Mar. 29, 2006. Talk: "Information Moving Infrastructure: Paradigms and Challenges".

14. I. Stavrakakis, "Situated and Autonomic Communication: Challenges and Opportunities", IST-FET Information Day, Jan. 13, 2005, Brussels. **[invited keynote**]

15. I. Stavrakakis, "The Role of Academia in Autonomic Communication Research", Autonomic Communication Forum, Inauguration Meeting, Dec. 8, 2004, Brussels. **[invited keynote**]

16. I. Stavrakakis, "Principles of Autonomic Communication Algorithms and Protocols", IST2004, Nov. 17, 2004, Hague. **[invited**]

FUNDED RESEARCH PROJECTS (Principal Investigator)

The funding level to date for the projects listed below amounts to: over 1 million dollars (USA) agents, over 4 million Euros (Greek and European Union (IST, FET, FIRE) funding agencies).

European Funded Research Projects (2000-present)

- Title: "5GROWTH-5G-enabled Growth in Vertical Industries", *Principal Investigator for NKUA*.
  Program: H2020- Information Societies Technology – ICT19. Funding Agency: European Union (EU). Period: 1/6/2019 – 31/12/2021. Participating Organizations: 1 Universidad Carlos III de Madrid UC3M ES, 2 NEC Laboratories Europe GMBH NEC DE, 3 Ericsson España S.A. ERC ES, 4 Ericsson Telecomunicazioni S.P.A. TEI IT, 5 InterDigital Germany GMBH IDG DE, 6 Nokia Bell NV NBL BE, 7 Telecom Italia S.P.A. TIM IT, 8 Telefónica Investigación y Desarrollo SA TID ES, 9 Altice Labs S.A. ALB PT, 10 Comau S.P.A. COMAU IT, 11 EFACEC Energia – Maquinas e equipamentos Electricos S.A. EFACEC_E PT, 12 EFACEC Engenharia e Sistemas S.A. EFACEC_S PT, 13 Asociación de Empresas Tecnológicas Innovalia INNOVALIA ES, 14 MIRANTIS Poland Spolka z Ograniczona Odpowiedzialnoscia MIRANTIS PO, 15 Nextworks NXW IT, 16 Telcaria Ideas S.L. TELCA ES, 17 Centre Tecnològic de Telecomunicacions de Catalunya CTTC ES, 18 Instituto de Telecomunicacoes IT PT, 19 Ethniko kai Kapodistriako Panepistimio Athinon NKUA GR, 20 Politecnico di Torino POLITO IT, 21 Scuola Superiore di Studi Universitari e di Perfezionamento Sant'Anna SSSA IT.
- Title: "SEOP Social Electricity Online Platform", *Principal Investigator for NKUA.*
  Lifelong Learning Program. Funding Agency: European Union (EU). Period: 1/1/2014 -31/12/2015. Participating Organizations: University of Cyprus (CY), MT MIEMA (MT), ECC (AT), EAC (CY), KREA (LT), INTEGRA (SI), MEATH (IE), CARDET (CY), QUALED (SK).
- Title: "EINS (European InterNet Science)" Network of Excellence". *Principal Investigator for NKUA*.
  Program: Information Societies Technology – Future Internet Research & Experimentation- FIRE. Funding Agency: European Union (EU). Period: 1/10/2011 -30/05/2015. Participating Organizations: About 35 research organizations and Universities.
- Title: "RECOGNITION: Relevance and cognition for self-awareness in a content-centric Internet", *Principal Investigator for NKUA.*
  Program: Information Societies Technology – Future Emerging Technologies (IST-FET). Funding Agency: European Union (EU). Period: 1/10/2010 -30/09/2013. Participating Organizations: Cardiff University (CU), Italian Research Council (CNR), University of Cambridge (UCAM), National and Kapodistrian University of Athens (NKUA), Institut Eurécom (EUR), Universita Degli Studi Di Firenze.
- Title: "Retune: Resilience of Opportunistic Networks to Node Misbehaviors", *Project Coordinator*.
  Program: EU Marie Curie Fellowship Program, Period: 6/2010 – 05/2012.
- Title: "SOCIALNETS: Social Networking for Pervasive Adaptation", *Principal Investigator for NKUA*.
  Program: Information Societies Technology – Future Emerging Technologies (IST-FET). Funding Agency: European Union (EU). Period: 1/2/2008 – 31/1/2011. Participating Organizations: Cardiff University (CU), Italian Research Council (CNR), University of Cambridge (UCAM), National and Kapodistrian University of Athens (NKUA), University of Oxford (OXF), University of Aveiro (UAVR) Institut Eurécom (EUR).
- Title: "CONTENT: Content Networks and Services for Home Users" (Network of Excellence), *Principal Investigator for NKUA.*
  Program: Information Societies Technology – IST. Funding Agency: European Union (EU). Period: 07/2006 – 06/2009. Participating Organizations: 11 Universities from Europe.
- Title: "BIONETS: BIOlogically-inspired autonomic NETworks and Services". *Principal Investigator for NKUA.*
  Program: Information Societies Technology – Future Emerging Technologies (IST-FET). Funding Agency: European Union (EU). Period: 1/1/2006 – 31/12/2009. Participating Organizations: CREATE-NET + IIT-CNR + University of Trento (CN, CN-CNR, CN-UNITN), Universität Basel (UBASEL, Technische Universität Berlin (TUB), Hamburger Informatik Technologie-Center e.V. (UNIHH), RWTH Aachen University (RWTH), Imperial College London (IC), Budapest University of Technology and Economics (BUTE), Nokia corporation (NOKIA), Valtion Teknillinen Tutkimuskeskus (VTT), Institut National de Recherche en Informatique et Automatique (INRIA), National and Kapodistrian University of Athens(NKUA), Telecom Italia Learning Services SpA (TILS), London School of Economics and Political Science (LSE), Sun Microsystems Iberica SA (SUN).

- Title: "ANA: Autonomic Network Architectures", *Principal Investigator for NKUA*.
  Program: Information Societies Technology – Future Emerging Technologies (IST-FET). Funding Agency: European Union (EU). Period: 1/1/2006 – 31/12/2009. Participating Organizations: Eidgenoessische Technische Hochschule Zurich, University of Basel, NEC EUROPE LTD, University of Lancaster, Fraunhofer Gesellschaft zur Foerderung der angewandten Forschung, Université de Liege, Université Paris VI Pierre et Marie Curie, National and Kapodistrian University of Athens, Universitetet I Oslo, Telekom Austria, University of Waterloo.
- Title: "CASCADAS: Component-ware for Autonomic, Situation-aware Communications And Dynamically Adaptable Services", *Principal Investigator for NKUA*.
  Program: Information Societies Technology – Future Emerging Technologies (IST-FET). Funding Agency: European Union (EU). Period: 1/1/2006 – 31/12/2008. Participating Organizations: Telecom Italia S.p.A., British Telecommunications, Budapest University of Technology and Economics BUTE, Fraunhofer Institute for Open Communication Systems FOKUS, Imperial College London ICL, INSTITUT EURECOM EUR, Politecnico di Milano - Dipartimento di Elettronica e Informazione, National and Kapodistrian University of Athens NKUA, Universität Kassel UNIK, Université Libre de Bruxelles ULB, Università di Modena e Reggio Emilia UNIMORE, Università degli Studi di Trento UNITN, University of Ulster UU, Consorzio per l'innovazione nella gestione delle imprese e della PA.
- Title: "CoMig: The Content Migration (CoMig) paradigm for Internet content dissemination", *Project Coordinator*.
  Program: EU Marie Curie Outgoing Fellowship Program, Period: 3/2005 – 9/2006.
- Title: "ACCA: Autonomic Communication Coordination Action". *Principal Investigator for NKUA*.
  Program: Information Societies Technology – IST, Future Emerging Technologies. Funding Agency: European Union (EU). Period: 10/2004 – 03/2006. Participating Organizations: 11 Universities from Europe.
- Title: "E-NEXT: Network of Excellence in Emerging Networking Experiments and Technologies", *Principal Investigator for NKUA*.
  Program: Information Societies Technology – IST. Funding Agency: European Union (EU). Period: 01/2004 – 06/2006. Participating Organizations: 41 Universities from Europe.
- Title: "E-NET: Emerging Networking (Network of Excellence)", *Principal Investigator for NKUA*.
  Program: Information Societies Technology – IST. Funding Agency: European Union (EU). Period: 07/2002 – 12/2003. Participating Organizations: 14 Universities from Europe.
- Title: "BROADWAY (Broadway, the way to broadband access at 60GHz)", *Principal Investigator for NKUA*.
  Program: Information Societies Technology – IST. Funding Agency: European Union (EU). Period: 01/02 – 12/04. Participating Organizations: Motorola SA (France), IMST GmbH (Germany), Technical University of Dresden (Germany), Netherlands Organization for Applied research (Netherlands), Intracom SA (Greece), University of Athens (Greece).
- Title: "A Video Gateway between the Next Generation Broadband Internet and the Current Narrow Band Internet for Live and On-Demand Access (VideoGateway)", *Principal Investigator for NKUA*.
  Program: Information Societies Technology – IST. Funding Agency: European Union (EU). Period: 01/00 – 12/02. Participating Organizations: Optibase (Israel), Matra Systemes & Information (France), T-Nova (Germany), CSELT (Italy), Teracom (Sweden), University of Athens (Greece).

Greek Funded Research Projects (2000-present)

- Title: "Opportunistic Adjustable Routing Mechanisms for Wireless Networks", *Principal Investigator for NKUA*. Program: International Cooperation. Funding Agency: General Secretariat for Research and Technology (G.S.R.T) of Greece. Period: 03/06 – 03/08. Participating Organizations: University of Pisa (UoP), Pisa, Italy, University of Athens (Greece).
- Title: "Ad-hoc Wireless and Sensor Networking: Algorithms, protocols and architectural studies", *Project Coordinator*. Program: PENED2005. Funding Agency: General Secretariat for Research and Technology (G.S.R.T) of Greece. Period: 2/2005 – 12/2008. Contributing/participating Organizations : INTRACOM.
- Title: "Short-Range, Multi-hop extensions WLANs", *Project Coordinator*. Funding Agency: Greek Ministry of Education, program Pythagoras II. Period: 15/2005-12/2006.

- Title: "Data Distribution in Wired/wireless Networks". *Project Coordinator*. Funding Agency: Greek Ministry of Education, program Hrakleitos",. Period: 1/2004-11/2005.
- Title: "Traffic Management of Video Streams over the Internet". *Principal Investigator for NKUA*. Program: International Cooperation. Funding Agency: General Secretariat for Research and Technology (G.S.R.T) of Greece. Period: 07/02 – 06/04. Participating Organizations: CNR – Istituto CNUCE, Pisa, Italy, University of Athens (Greece).
- Title: "Mechanisms for Networked Multimedia Support", *Project Coordinator*, National and Kapodistrian University of Athens, Research Committee. Period: 2001.
- Title: "Resource Management and Traffic Control for Wide Area Networks under QoS Constraints". *Principal Investigator for NKUA*. Program: EPET II. Funding Agency: General Secretariat for Research and Technology (G.S.R.T) of Greece. Period: 01/00 – 09/01. Participating Organizations: Greek National Centre for Scientific research (NCSR) Demokritos, National Technical University of Athens (NTUA), University of Athens (Greece).
- Title: "Mechanisms for Networked Multimedia Support", *Project Coordinator*, National and Kapodistrian University of Athens, Research Committee. Period: 2000.

U.S.A. Funded Research Projects (1990-99)

- U.S.A. National Science Foundation, Research Initiation Award, Period: 1990-1992.Title: "Performance Analysis of Communication Networks under m|τ|MM|r|B Packet Arrival Processes", *Principal Investigator.*
- U.S.A. Department of Defense, Advanced Research Project Agency (ARPA). Period: 1992-1995. Title: "Development of User-Matched/Network-Friendly Traffic Profiles for Congestion Control in High Speed Fiber Optics Networks". *Principal Investigator.*
- GTE Government Systems Corporation. Period: 8/1/91 – 7/31/96. Title: "Research and Curriculum Development in Communication Networks", *Principal Investigator* after 9/94.
- Northeastern University, College of Engineering. Title: "Student Support for Research on Resource Management for Diverse Quality of Service (QoS) Delivery in Communication Networks", *Principal Investigator.*
- U.S.A. National Science Foundation. Period: 9/1/96 – 8/31/1999. Title: "Time-Constant-Based Traffic Control and Multiplexing for High-Speed Networks", *Principal Investigator.*
- Motorola, Inc. Period: 3/15/98-9/15/98. Title: "Research on Protocols for Broadband Access", *Principal Investigator.*
- BBN Technologies (GTE Internetworking. Period: 11/98-9/99. Title: "Density Adaptive Routing for the DAWN Project", *Principal Investigator.*
- U.S.A. Department of Defense, Advanced Research Project Agency (ARPA). Period: 1993-1996. Title: "Multi-scale Digital Communications", *One of 6 Co-Principal Investigators since 9/94.*
- Italian National Research Council (CNR). Period: 1995-1996. Title: "Real-Time Traffic Management in High-speed Integrated Services Networks". Institution: CNR – Istituto CNUCE, Pisa, Italy / Northeastern University, *Principal co-Investigators.*
- GTE Corporation. Period: 1997-1998. Title: "Research and Curriculum Development in Wireless Communication Systems", *One of 6 Co-Principal Investigators since 9/94.*

FUNDED RESEARCH PROJECTS (Participant – not a Principal Investigator)

- EU-project PURSUIT (AUBE, 2012)
- EU-project ImmigrationPolicy2.0 (UNIPI, 2012-2013)
- EU-project OPTET (AUBE, 2014)
- EU-project WATTALYST (AUBE, 2014
- EU-project DAEDALUS (UNIPI, 2015)
- EU-project MEDUSA (UNIPI, 2015)
- EU-project ASCETIC (AUBE, 2016)

- EU-project MITIGATE (UNIPI, 2016)
- EU-project ReCRED (UNIPI, 2016-2018)
- EU-project SAURON (UNIPI, 2018-2020)
- EU-project CroCo (NKUA, 2021)
- EU-project CyberSec4Europe (UNIPI, 2020-2022)

TEACHING AND STUDENT SUPERVISION

Invited Short Courses - tutorials

- Invited Full Day Short Course by I. Stavrakakis at the ICIS (Intelligent Computing for the Internet of Services and Things project) Summer School on "Resource Competition in a Highly Networked World of Humans and Things", June 23, 2015, Coimbra.
- Invited 2-week course, University of Trento, 2005.

Courses Taught

- EE 171, Signals and Systems (required, undergraduate, UVM).
- EE 174, Introduction to Communication Systems (required, undergraduate, UVM).
- EE 270, Probability Theory and Stochastic Processes (core in Signals and Systems, graduate, UVM).
- EE 295, Stochastic Models for Data Networks (graduate, UVM).
- EE 373, Digital Communications (graduate, UVM).
- EE 378, Special Topics in Statistical Communication and Related Fields (graduate, UVM).
- ECE 3241, Applied Probability and Stochastic Processes (required, graduate, NU).
- ECE 1458, Communication Networks (undergraduate, NU).
- ECE 3511, Data Networks (graduate, NU).
- Communication Networks I (required, undergraduate, (UoA)
- Advanced Networking Technologies (graduate, UoA)
- Network Modelling and Performance Evaluation (graduate, UoA).

Supervised M.Sc. Theses

1. "Distributed Proactive Caching in a Group of Selfish Nodes", **Ioanna Deli**, 2016 [UoA]
2. "Social Psychological Incentives for Collaboration in Virtual Communities", **Martha C. Liakopoulou**, 2014 [UoA]
3. "SIEM Optimization Using Honeypots", **Thomas Antoniou Ailianos**, 2014 [UoA]
4. "Electric vehicles in smart grids", **Aikaterini Syka**, 2014 [UoA]
5. "Vulnerability of parking assistance systems to vehicular node misbehaviors", **Georgios K. Kollias, Maria G. Papadaki**, 2013 [UoA]
6. "An OpenFlow framework for integrated simulation and live experimentation", **Alexandros Kouvakas**, 2013 [UoA]
7. "On socio-centric approaches to routing in wireless ad hoc networks", **Pavlos Nikolopoulos, Therapon Papadimitriou**, 2012 [UoA].
8. "Experimental set up for Opportunistic Networks", **Costantinos Ztoupis, Anastasios Sykas**, 2012 [UoA]
9. "Study of Packet Forwarding Algorithms in Delay Tolerant Networks", **Theodoros Drivas**, 2009 [UoA]
10. "Efficient Content Searching Schemes for Peer-to-Peer Networks", **Panagiotis Pandazopoulos,** 2008 [UoA]
11. "Analysis of node cooperation under uncertainty in Content Distribution Networks", **Eva Jaho**, 2007 [UoA]
12. "Reputation-based trust mechanisms for autonomic networks", **Ioannis Manolopoulos**, 2007 [UoA].

13. "Scalable service migration for optimal service provision over a network", **Alexis Xydias,** 2007 [UoA]
14. "Performance analysis of the IEEE 802.11 WLANs**", Emmanuil Kafetzakis**, 2004 [UoA]
15. "Web-caching and meta-algorithms for hierarchical caches", **Sophia Syntila**, 2003 [UoA]
16. "ns-2 simulation-based analysis of the lifetime of multi-hop paths in ad-hoc networks", **Nikos Zinelis**, 2003 [UoA]
17. "Study of Wireless LANs and Metropolitan Networks", **Dimitris Kogias**, 2004 [UoA]
18. "Routing in Ad Hoc Networks", **Giannis Gravaris, Nasos Vaios**, May 2002 [UoA]
19. "Study of the Impact of Replacement Granularity on Video Caching", **Elias Balafoutis**, June 2002 [UoA]
20. "Performance Evaluation for Medium Size Buffers", **Christos Mpitas**, June 2002.[UoA]
21. "A Real-Time Transmission Scheduling Platform", **Nikos Karelos**, June 2002 [UoA].
22. "Video Transmission over IP Networks", **Georgios Ioannidis**, June 2002 [UoA].
23. "Real Time Application support in Best Effort Networks", **Nikolaos Laoutaris**, June 2001 [UoA].
24. "Offered Load Estimation for a Multimedia Cable Network System", **Firass Abi-Nassif**, Sept. 1998 [NU].
25. "Study of Various TDMA Schemes for Wireless Networks in the Presence of Deadlines and Overhead", **Cesar Santivanez**, Sept. 1998 [NU]
26. "Study of Impact of Network and Source Time Scales on Feedback-Based Congestion Control", **Tamer Dag**, Feb. 1997. [NU].
27. "A Cooperative Scheduling and Regulation Scheme for Real-Time Communications", **Steve Iatrou**, Feb. 1997. [NU].
28. "ATM Buffer Management for Time Constrained Traffic", **Geping Chen**, June 1995. [NU].
29. "Analytical Models for the Performance Evaluation of the DQDB Metropolitan Area Network", **Randall Landry**, Aug. 1992. [UVM].
30. "A Proposed Congestion Control Mechanism for a High Speed ATM Network**", David Hoag**, July 1992. [UVM].

Supervised Ph.D. Dissertations

1. **Ioannis Manolopoulos,** "Methodologies for Effective Self-adaptive Decisions in Routing, Signalling, Cooperation, and Other Operations in Diverse Mobile Networks" (2015, University of Athens).

2. **Panagiotis Pantazopoulos,** "Internet Content Management using Complex Network Analysis techniques",(2014, University of Athens), Currently post-doc, National Technical University of Athens.

3. **Evaggelia Kokolaki,** "Information dissemination and consumption in competitive networking urban environments" (2014, University of Athens).

4. **Eva Jaho,** "Cooperative mechanisms for information dissemination and retrieval in networks with autonomous nodes" (2011, University of Athens). Currently with the Athens Technology Center (ATC S.A.), Athens, Greece.

5. **Emmanouil Kafetzakis,** "Effective Capacity-based Stochastic Guarantees for Systems with Time-Varying Servers, with an Application to IEEE 802.11 WLANs" (2011, University of Athens). Currently with the Institute of Informatics & Telecommunications NCSR 'Demokritos', Athens, Greece.

6. **Leonidas Tzevelekas,** "Energy efficient algorithms for topology control and information dissemination/ retrieval in large scale Wireless Sensor Networks" (2010, University of Athens). Employment: : Greek NREN, GRNet, Athens Greece.

7. **Dimitris Kogias,** "Study and Design of Algorithms for Information Dissemination in Unstructured Networking Environments", (2010, University of Athens). Employment: TEI Athens

8. **Constantinos Vassilakis**, "Content distribution support in modern wireless and wired networks", (2008, University of Athens). Employment: Greek NREN, GRNet.

9. **Athanasios Vaios,** "Short-range multi-hop communication extension to Wireless LANS", (2008, University of Athens). Employment: Information Systems Division, at the University of Athens.

10. **Pandelis Balaouras,** "Rate Adaptation Schemes for Continuous Media Steams", (2005, University of Athens). Employment: Multimedia Division at the University of Athens.

11. **Nikolaos Laoutaris**, "Modeling and Optimization of Content Networks", (2004, University of Athens). Employment: Marie-Curie Post-Doc Fellow, Boston University – University of Athens; Post- Doc Fellow at Harvard University; Researcher at Telefonica I&D, Barcelona.

12. **Konstantinos Oikonomou**, "Topology Unaware MAC Protocols for Ad Hoc Networks", (2004, University of Athens). Employment: Assistant professor, Ionian University, Corfu, Greece.

13. **Antonis Panagakis**, "Study of the capacity of Static Weight Allocation Scheduling schemes and Wireless Multi-hop Networks", (2004, University of Athens). Employment: Hellenic Telecommunications and Post Commission (EETT).

14. **Cesar Santivanez,** "Mechanisms toward a Multi-mode Routing Protocol for Mobile Ad Hoc Networks", (2001, Northeastern University, USA). Employment: BBN Technologies, Boston (USA).

15. **Zoe Antoniou**, "Scheduling Algorithms for Application-Level QoS Support of Continuous Media Streams", (1999, Northeastern University, USA). Employment: Nokia Research Center, Boston (USA).

16. **Tamer Dag**, "Proactive/Reactive Congestion Control Schemes for High Speed Networks", (1999, Northeastern University, USA). Employment: Lucent Technologies; Isik University (Turkey).

17. **Jeffrey Capone**, "Achievable QoS and Scheduling Policies for Integrated Services Wireless Networks", (1997, Northeastern University, USA). Employment: Arizona State University (USA);

18. **Mohamed Abdelaziz** , "Traffic Management and Congestion Control", (1995, University of Vermont, USA). Employment: Lucent Technologies;

19. **Randall Landry**, "Performance Evaluation of Asynchronous Transfer Mode (ATM) Networks", (1994, University of Vermont, USA). Employment: Texas Instruments, Dallas (USA); Mitre Corp., Boston (USA).

20. **Sophia Tsakiridou** "Queuing Analysis of Resource Allocation Policies for Communication Networks" **(**1994, University of Vermont, USA). Employment: University of Vermont (USA); Canadian Research Center (CA); Technical University of Crete.

Funded Post-Doctoral Research Associates

1. **Dr. Evangelia Kokolaki** (2014 - 2015)
2. **Dr. Leonidas Tzevelekas** (2014 - 2015)
3. **Dr. Merkourios Karaliopoulos** (2009 – 2012).
4. **Dr. Konstantinos Oikonomou** (2006-2010), then Assistant Professor, Ionian University
5. **Dr. Christos Xenakis (**2007-2009), then Assistant Professor, University of Peiraias
6. **Dr. Gregoris Karagiorgos** (2007-2009), then with Higher Technological Institute of Sparta.
7. **Dr. Giannis Koukoutsidis** (2007-2008), then with the University of Peloponnese.
8. **Dr. Nikolaos Laoutaris** (2006-07), then with Harvard University, then with Telefonica Research I+D, Barcelona, currently with IMDEA Networks (Madrid).

Graduate Student Examination Committee Participation (Greek, outside UoA)

Sotiris-Angelos Lenas (DUTH, 2015), Elena Stai (NTUA, 2014), George Aristomenopoulos (NTUA, 2013), Prodromos Makris (U. Aegean, 2013), Timotheos Kastrinogiannis (NTUA, 2009), George Oikonomou (AUBE, 2008), Panayotis Antoniadis (AUBE, 2006).

Graduate Student Examination Committee Participation (outside Greece)

- Ph. D. examination committee member for Tobias Rückelt, Technical University of Darmstadt, Oct 5, 2017
- Ph. D. examination committee member for Musab Muhammad Isah, Lancaster University, Oct 3, 2017.
- Ph. D. examination committee member for Pavlos Sermpezis, Eurecom Institute, Feb. 10, 2015, France.
- Ph.D. examination committee member for Evangelos Pournaras, Delft University, March 26, 2013, Delft, Netherlands.

- Ph.D. examination committee member for Andreas Kamilaris, University of Cyprus, Dec 17, 2012, Cyprus.

- Ph.D. examination committee member for Siyu Tang, Delft University, Sept. 21, 2010, Delft, Netherlands.

- Ph.D. examination committee member for Ruben Cuevas, Universidad Carlos III de Madrid (UC3M), June, 2010, Leganés (Madrid), Spain

- Ph.D. examination committee member for Vittorio Manetti, end of 2009, University of Napoli, Italy.

- Ph.D. examination committee member for Thomas Silverstone, UPMC, Sept 2009, University Pierre Marie Currie (UPMC), France.

- Ph.D. examination committee member for Michalis Markou, University of Cyprus, July 2009, Cyprus.

- Ph.D. examination committee member for D. Antonio de la Oliva Delgado, Universidad Carlos III de Madrid (UC3M), July 2008, Leganés (Madrid), Spain

- Ph.D. examination committee member for Roberto Cascella, Dec 2007, University of Trento, Italy.

- Ph.D. examination committee member for Ramin Hekmat, June 2005, Technical University of Delft, Netherlands.

- Member of the Advisory and Examination Committee for 21 graduate students (M.Sc. and Ph.D. before 2006).

Textbooks

- Translation in Greek of the text: "Communication Networks: A First Course", Jean Walrand, McGraw-Hill, second edition, 1998 (with Prof Merakos), to be published, fall 2003.

PROFESSIONAL ACTIVITIES

Book/CD Editorial

- F. Bagnoli, A. Satsiou, I. Stavrakakis, P. Nesi, G. Pacini, Y. Welp, T. Tiropanis, D. DiFranzo, proceedings of the Third International Conference on Internet Science (INSCI 2016), Sept 12-14, 2016, Florence, Italy; *Lecture Notes in Computer Science, LNCS 9934, Springer*.

- C. Douligeris, I. Stavrakakis, proceedings of the 6th Annual IFIP Mediterranean Ad Hoc Networking Workshop (Med-Hoc-Net 2007), June 13-15, 2007, Corfu, Greece.

- I. Stavrakakis, M. Smirnov (editors), "Autonomic Communications, 2nd International IFIP Workshop WAC2005, Athens, Greece, October 2005", *Lecture Notes in Computer Science – LNCS, vol. 3854, Springer-Verlag*, Heidelberg, Germany, 2006.

- Eitan Altman, Holger Karl, Ravi Mazumdar, Ioannis Stavrakakis, proceedings of the 3rd International Symposium on Modeling and Optimization in Mobile, Ad Hoc, and Wireless Networks (WiOpt'05), 4-6 April 2005 • Riva del Garda, Trentino, Italy (*IEEE Computer Society*)

- M. Smirnov E. Biersack C.Blondia, O. Bonaventure, O. Casals, G. Karlsson, G. Pavlou, B. Quoiyin, J. Roberts, I. Stavrakakis, B. Stiller, P. Trimintzios, P. Mieghem (editors), "Quality of Future Internet Services - COST Action 263 Final Report", *Lecture Notes in Computer Science, Vol. 2856, Springer-Verlag*, Heidelberg, Germany, 2003

- G. Pujolle, H. Perros, S. Fdida, U. Korner, I. Stavrakakis (editors), "Networking'2000", *Springer Verlag*, May 2000.

Journal Editorial Work

- Journal Editorial Board Member for:
  - Proceedings of IEEE (2015 -)
  - Elsevier Computer Communications Journal (2008 -).
  - IEEE/ACM Transactions on Networking (2001 - 2008)
  - ACM/Springer Wireless Networks (WINET) Journal (1998 - 2009).
  - Computer Networks (The International Journal for Computer and Telecommunications Networking), North-Holland (1999 - 2006).
  - ACM/Baltzer Wireless Networks (WINET) Journal (1998 -).
- Journal Guest Editorial: C. Blondia, I. Stavrakakis, "In Memory of Olga Casals", Computer Networks Journal, Vol. 45, Iss. 3, June 2004.
- Journal Guest Editorial: L. Merakos, I. Stavrakakis, "Editorial for the Special Issue on Channel Access on Wireless Networks", *ACM/Baltzer Mobile Networks and Applications (MONET),* Vol. 2, No. 1, pp. 1-2, 1997.
- Journal Guest Editorial: I. Stavrakakis, T. Chen, "Editorial for the Special Issue on Wireless LAN's", *ACM/Baltzer Mobile Networks and Applications (MONET****),* Vol. 3, No. 3, pp. 235-236, 1998.
- Reviewer for the Journals:
  IEEE Transactions on Communications; IEEE/ACM Transactions on Networking; IEEE Journal on Selected Areas in Communications; IEEE Transactions on Information Theory; Computer Networks Journal; Annals of Operations Research; Telecommunications Systems; Performance Evaluation Journal; ACM/Baltzer Mobile Networks and Applications (MONET) Journal; ACM/Baltzer Wireless Networks (WINET) Journal, etc.

Conference Organization

- Major involvement in Conference organization:

  - General co-Chair, Second International Balkan Conference on Communications and Networking (BalkanCom'18), June 5-8, 2018, Podgorica, Montenegro

  - Session Organizer, First International Balkan Conference on Communications and Networking (BalkanCom'17), May 30- June 2, 2017, Tirana, Albania.

  - Co-Chair, Third International Conference on Internet Science (INSCI 2016), Sept. 12-14, 2016, Florence, Italy.

  - Co-Chair, Autonomic and Opportunistic Communications (AOC'08) workshop of the 2nd IEEE WoWMoM conference, June 23, 2008, Newport Beach, California.

  - General co-Chair, Sixth Annual Mediterranean Ad Hoc Networking Workshop (Med-Hoc-Net 2007), June 13-15, 2007, Corfu, Greece.

  - Co-Chair, Autonomic and Opportunistic Communications (AOC'07) workshop of the first IEEE WoWMoM conference, June 18, 2007, Helsinki, Finland.

  - Co-organizer of NeXtworking '07, the Second COST-NSF Workshop on Future Internet: From Fundamentals to Experiments, April 19–20, 2007, Berlin.

  - General Chair and Technical Program Committee co-chair for the 2nd International IFIP Workshop on Autonomic Communication (WAC'05), Oct. 3-5, 2005, Vouliagmeni, Athens, Greece.

  - Technical Program co-chair, 3rd IEEE International Symposium on Modeling and Optimization of Mobile, Ad Hoc and Wireless Networks (WiOpt), April 4-6, 2005, Trento, Italy

  - Technical Program co-Chair, Fifth European Wireless Conference (EWC'04) "Mobile and Wireless Systems beyond 3G", February 24-27, 2004, Barcelona, Spain

  - General Chair and Technical Program Committee co-chair, COST-IST (EU) - NSF (USA) Workshop on Networking (NeXtworking'03), June 23-25, 2003, Chania, Crete, Greece.

- General Vice-Chair, IFIP Networking'2002, May 2002, Pisa, Italy.
- Technical Program Co-chair, IFIP Networking'2000, Paris, France.
- Organizer of the 1999 IFIP WG6.3 Workshop, Crete, Greece, Sept. 1999.
- Co-organizer of the 1996 International Teletraffic Congress (ITC) Mini-seminar on "Performance Modeling and Design of Wireless/PCS Networks", Oct. 1996, Boston, USA.
- IEEE TCCC representative (responsible for about 9 sessions) in the 1995 International Conference on Communications (ICC'95).

- Member of the Steering Committee:
  - Autonomic Opportunistic Communications Workshop (AOC) of the IEEE WoWMoM conference (2007 -).
  - Conference on Wireless On demand Network Systems and Services (IFIP/IEEE WONS 2005 -).
  - IFIP Networking (2003-2009).
  - CONEXT (2003-2006).
  - Next Generation Tele-traffic and Wired/Wireless Advanced Networking (NEW2AN)

- Member of the Technical Program Committee: 2015-19:
  - IEEE WoWMoM 2019,20th IEEE International Symposium on a World of Wireless, Mobile and Multimedia Networks, June 9-12, 2019, Washington, DC. USA.
  - IEEE INFOCOM 2019, 29 April - 2 May 2019, Paris, France
  - IFIP/IEEE NETWORKING 2019, May 20-22, 2019 – Warsaw, Poland.
  - 15th Conference on Wireless On-demand Network Systems and Services (IEEE/IFIP WONS'19), 22-24 January 2019, Wengen, Switzerland.
  - IEEE WoWMoM 2018,19h IEEE International Symposium on a World of Wireless, Mobile and Multimedia Networks, June 12-15, 2018, Chania, Greece.
  - IEEE INFOCOM 2018, April 15-19, Honolulu, USA
  - IFIP/IEEE NETWORKING 2018, May 14-16, 2018, Zurich, Switzerland.
  - 14th Conference on Wireless On-demand Network Systems and Services (IEEE/IFIP WONS'18), Feb. 6-8, 2018, Isola 2000, France.
  - 25th IEEE International Conference on Network Protocols (ICNP 2017), Oct 10-13, 2017, Toronto, Canada.
  - First International Balkan Conference on Communications and Networking (BalkanCom'17), May 30-June 2, 2017, Tirana, Albania.
  - IEEE WoWMoM 2017,18th IEEE International Symposium on a World of Wireless, Mobile and Multimedia Networks, June 12-15, Macao, China.
  - The 13th Conference on Wireless On-demand Network Systems and Services (IEEE/IFIP WONS'13), Feb. 21-24, 2017, Jackson Hole, Wyoming, USA.
  - IEEE INFOCOM 2017, May 1-4, 2017, Atlanta, USA
  - IEEE WoWMoM 2016,17th IEEE International Symposium on a World of Wireless, Mobile and Multimedia Networks, June 21-24, 2016, Coimbra, Portugal.
  - IFIP/IEEE NETWORKING 2016, May 17-19, 2016, Vienna, Austria.
  - The 12th International Conference on Wireless On-demand Network Systems and Services (IFIP/IEEE WONS), 20 - 22 January 2016, Cortina d'Ampezzo, Italy
  - IEEE INFOCOM 2016, April 10-15, 2016, San Francisco, CA, USA

- IEEE ICC 2015 - Workshop on Dynamic SOcial Networks (DySON), June 9-12, 2015, London, UK.
- IFIP/IEEE NETWORKING, May 20 - 22, 2015, Toulouse, France
- IEEE SECON, the IEEE International Conference on Sensing, Communication, and Networking, June 22-25, 2015, Seattle
- IEEE WoWMoM 2015,16th IEEE International Symposium on a World of Wireless, Mobile and Multimedia Networks, June 14-17, 2015, Boston, USA
- Conference on Networked Systems (NetSys) , March 9-12, 2015, Cottbus, Germany
- IEEE INFOCOM 2015, April 26 – May 1, 2015, Hong Kong.
- 12th International Conference on Mobile and Ubiquitous Systems: Computing, Networking and Services, July 22–24, 2015, Coimbra, Portugal
- Second International Conference on Internet Science, May 27-29, 2015, Brussels

- Member of the Technical Program Committee: 2003-2014:
  - IEEE WoWMoM 2014, 15th IEEE International Symposium on a World of Wireless, Mobile and Multimedia Networks, June 16-19, 2014, Sydney, Australia.
  - IFIP/IEEE Networking 2014 Conference, June 2-4, 2014 – Trondheim, Norway
  - IEEE INFOCOM 2014, April 27 – May 2, 2014, Toronto, Canada.
  - Sixth Workshop on Network Science for Communication Networks (NetSciCom), in conjunction with IEEE INFOCOM, April 27 – May 2, 2014, Toronto, Canada.
  - The 11th International Conference on Wireless On-demand Network Systems and Services (IFIP/IEEE WONS), April 2-4, 2014, Obergurgl, Austria.
  - IFIP IWSOS 2013, 7th International Workshop on Self-organizing Systems, Palma de Mallorca, 9-10th of May, 2013.
  - The first international conference on Internet Science", the Royal Flemish Academy of Belgium for Science and the Arts (KVAB), April 10-11, 2013, Brussels.
  - IEEE ICC 2013 Workshop "Beyond Social Networks: Collective Awareness", June 13, 2013 , Budapest, Hungary.
  - IEEE WoWMoM 2013, 14th International Symposium on a World of Wireless, Mobile and Multimedia Networks, June 4-7, 2013, Madrid – Spain.
  - 18th IEEE International Symposium on Computer and Communications, (ISCC'13) July 7-10, 2013, Split, Croatia.
  - IFIP/IEEE NETWORKING 2013, May 22-24, 2013, Brooklyn, New York, USA.
  - IEEE INFOCOM 2013, April 14-19, 2013 - Turin, Italy.
  - Fifth Workshop on Network Science for Communication Networks (NetSciCom), in conjunction with IEEE INFOCOM, April 14-19, 2013 - Turin, Italy.
  - The 10th International Conference on Wireless On-demand Network Systems and Services (IFIP/IEEE WONS), March 18-20, 2013, Banff, CA
  - 17th IEEE International Symposium on Computer and Communications, 1-4, 2012, Cappadocia, Turkey.
  - IEEE WoWMoM 2012, 13th IEEE International Symposium on a World of Wireless, Mobile and Multimedia Networks (WoWMoM), June 25-28, 2012, S. Francisco, CA.
  - IFIP/IEEE NETWORKING 2012, May 21 – 25, Prague, Czech Republic.
  - IEEE/IFIP International Symposium on Modeling and Optimization of Mobile, Ad Hoc and Wireless Networks (WiOpt), May 14th - 18th, 2012, Paderborn, Germany

- Third International ACM Workshop on Mobile Opportunistic Networks (ACM MobiOpp), March 15-16, 2012, Zurich, Switzerland.

- IFIP IWSOS 2012, 6th International Workshop on Self-organizing Systems, March 15-16, 2012, Delft, NL.

- IEEE INFOCOM 2012, March 25-30, Orlando, Florida.

- Forth Workshop on Network Science for Communication Networks (NetSciCom), in conjunction with IEEE INFOCOM, March 30, 2012, Orlando, Florida

- The 9th International Conference on Wireless On-demand Network Systems and Services (IFIP/IEEE WONS), Jan. 9-11, 2012, Courmayeur, Italy

- 16th IEEE Symposium on Computers and Communications (ISCC'11) June 28 - July 1, 2011, Kerkyra (Corfu), Greece

- 12th IEEE International Symposium on a World of Wireless, Mobile and Multimedia Networks (WoWMoM), June 20-24, 2011, Lucca, Tuscany, Italy.

- IEEE INFOCOM 2011, April 10-15, 2011, Shanghai, China.

- Third Workshop on Network Science for Communication Networks (NetSciCom), in conjunction with IEEE INFOCOM, April 15, 2011,Shanghai, China.

- IFIP NETWORKING 2011, May 9-13, 2011, Valencia, Spain.

- 18th International Conference on Telecommunications 2011 (ICT 2011), May 8-11, 2011, Ayia Napa, Cyprus.

- The Eighth International Conference on Wireless On-demand Network Systems and Services (IFIP/IEEE WONS), Jan 26-28, 2011, Bardonecchia, Italy

- 11th IEEE International Symposium on a "World of Wireless, Mobile and Multimedia Networks," WoWMoM 2010, June 13-17, 2010, Montreal.

- IFIP NETWORKING 2010, May 10-14, 2010, Chennai, India.

- IEEE INFOCOM conference, March 15-19, 2010, San Diego, USA.

- Second Workshop on Network Science for Communication Networks (NetSciCom), in conjunction with IEEE INFOCOM, March 19, 2010, San Diego, USA.

- Seventh International Conference on Wireless On-demand Network Systems and Services (IFIP/IEEE WONS), Feb. 3-5, 2010. Kranjska Gora, Slovenia.

- Eighth IEEE International Conference on Pervasive Computing and Communications (PerCom), March 29 – Apr. 2, 2010, Mannheim, Germany.

- Second ACM/SIGMOBILE International Workshop on Mobile Opportunistic Networking (MobiOpp), Feb. 22-23, 2010, Pisa, Italy.

- Sixth Annual Conference on Wireless On demand Network Systems and Services (IFIP/IEEE WONS 2009)

- IEEE PerCom'09, 7th IEEE International Conference on Pervasive Computing and Communications Galveston, Texas, March 9-13, 2009.

- IEEE Infocom'09, April, 19-25, 2009, Rio, Brasil.

- PerSeNS 2009, Fifth IEEE International Workshop on Sensor Networks and Systems for Pervasive Computing (an IEEE PerCom Workshop), March 16-20, Dallas, USA

- IEEE Infocom'08, April 13-18, 2008, Phoenix, AZ.

- The 7th IFIP Annual Mediterranean Ad Hoc Networking Workshop Med-Hoc-Net'08, June 23-27 2008, Palma de Mallorca, Spain

- PerSeNS 2007, Third IEEE International Workshop on Sensor Networks and Systems for Pervasive Computing (an IEEE PerCom Workshop), March 19-23, 2007, White Plains, NY.

- COMSWARE '07, IEEE/Create-Net/ICST International Conference on COMmunication System softWAre and MiddlewaRE, Bangalore, India on January 7-12 , 2007

- WONS'07, 4th Annual Conference on Wireless On demand Network Systems and Services, Jan. 24-26, 2007, Obergurgl, Austria.

- IEEE Infocom'07, May 6-12, 2007, Anchorage, Alaska, USA.

- ACM MOBIHOC'07, Sept. 9-14, 2007, Montreal.

- IEEE Infocom'06, April 24-27, 2006, Barcelona, Spain.

- WiOpt'06, 4th Intl. Symposium on Modeling and Optimization in Mobile, Ad Hoc, and Wireless Networks, April 3-7, 2006, Boston.

- WONS'06, 3rd Annual Conference on Wireless On demand Network Systems and Services, Jan. 18-20, 2006, Les Mɪnuires, France.

- IPCCC'06, IEEE International Performance Computing and Computing Conference, April 10-12, 2006, Phoenix, Arizona.

- PerSeNS 2006, Second IEEE International Workshop on Sensor Networks and Systems for Pervasive Computing (part of PerCom), March 13, 2005, Pisa.

- IFIP NetCon'05, Network Control and Engineering for QoS, Security and Mobility, Nov. 14-18, 2005, Lannion, France.

- 13th IEEE International Conference on Network Protocols (ICNP), Nov. 6-9, 2005, Boston.

- CoNEXT'05, Oct 24-27, 2005, Toulouse.

- REALMAN workshop, IEEE ICPS Workshop on Multi-hop Ad hoc Networks: from theory to reality, July 14, 2005, Santorini.

- IEEE International Workshop on Wireless Mobile Multimedia (WoWMoM), First International Workshop on Autonomic Communications and Computing (ACC 2005) June 13, 2005 Taormina, Italy.

- IEEE Senmetrics' 05, July 21, 2005, San Diego.

- IEEE WICON'05, July 13-15, 2005, Budapest.

- IFIP Networking'05, May 2-6, 2005, Waterloo, Canada.

- IEEE PerCom 2005, First Workshop on Sensor Networks and Systems for Pervasive Computing (PerSeNS'05),   Workshop   on   Sensor   Networks   and   Systems for Pervasive Computing (PerSeNS'05March 8-12, 2005, Kauai Island, Hawaii.

- IEEE Infocom'05, March 13-17, Miami.

- IFIP WONS'05, Jan. 19-21, 2005, St. Moritz.

- Med-Hoc-Net 2004, The Third Annual Mediterranean Ad Hoc Networking Workshop, June 27-30, 2004 Bodrum, Turkey.

- IEEE International Conference on Next Generation Teletraffic and Wired/Wireless Advanced Networking (NEW2AN'04), February 02-06, 2004, R&D LONIIS, St.Petersburg, Russia.

- First Working Conference on Wireless On-demand Network Systems (WONS 2004), January 21-23, 2004, Madonna di Campiglio, Trento, Italy.

- 12th IEEE International Conference on Network Protocols (ICNP), Oct. 5-8, 2004, Berlin, Germany.

- IEEE INFOCOM'04, March 7-11, 2004, Hong Kong.

- International Workshop on Quality of Future Internet Services (QofIS), Sept. 29 – Oct. 1, 2004, Barcelona, Spain.

- The 1st IEEE International Conference on Mobile Ad-hoc and Sensor Systems (MASS), Oct. 25-27, 2004, Fort Lauderdale, Florida, USA

- 16th ITC Specialist Seminar on Performance Evaluation of Wireless and Mobile Systems, August 31 - September 02, 2004, University of Antwerp, Antwerp, Belgium.
- IFIP Net-Con'2004, Nov. 3 - 5, 2004, Palma de Mallorca, Spain.
- 11th IEEE International Conference on Network Protocols (ICNP), Atlanta, Georgia, USA, November 4-7, 2003
- International Workshop on Quality of Future Internet Services (QofIS), Oct 1-3, 2003, Stockholm, Sweden.
- Eighth International Conference on Personal Wireless Communications (PWC'2003): Mobile and Wireless Communications, Sept. 23-25, 2003, Venice, Italy
- IEEE INFOCOM'03, March 30-April 4, 2003, San Francisco.
- First IEEE International Workshop on Sensor Networks and Applications (SNPA 2003), Anchorage, Alaska, 2003.

- Member of the Technical Program Committee: before 2003:
  - IEEE INFOCOM'92,'93,'94,'95,'96,'97, '98, '01, '02
  - European Wireless Conference, 2002
  - IEEE ICC Wireless Networking Symposium, 2002
  - Workshop on Wired/Wireless Internet Communications (WWIC 2002)
  - IEEE/IFIP Net-Con'2002 (Network Control and Engineering for QoS, Security and Mobility with focus on Policy-based Networking)
  - Communication Networks and Distributed Systems Modeling and Simulation Conference (CNDS), San Antonio, Texas, January 27-31, 2002.
  - International Workshop on Quality of Future Internet Services (QofIS), 2000, 2001, 2002.
  - 14th ITC Specialists Seminar on Access Networks and Systems, 2001
  - IEEE ICUPC'96 & 97
  - IEEE Wireless Communications and Networking Conference (WCNC'99)
  - Fifth International Conference on Data Communication Systems and Their Performance (1993, IFIP)
  - International Workshop on Performance Modeling and Evaluation of ATM Networks (IFIP), 1994, 1995, 1996, 1997, 1998
  - 9th IFIP Working Conference on ATM & IP Networks (IFIP ATM & IP 2001)
  - SPIE International Conference on Voice, Video, and Data Communications, 1996, 1998
  - Tenth ITC Specialist Seminar "Control in Communications" (1996)
  - Performance of Information and Communications Systems (PICS'98, IFIP)
  - 1999 Internet Workshop (IWS'99)
  - International Conference on Performance and QoS of Next Generation Networking (P&Qnet2000).
- Session Organizer:
  - IEEE GLOBECOM'92&'93
  - IEEE ICC'94
  - IEEE MILCOM'98
- Session Chair:
  - Session "Innovation in Services", 3rd Broadband Networks and Services: "Innovation in Broadband Networks and Services", June 6-8, 2008, Grand Resort Lagonissi, Athens, Greece. http://www.eett.gr/conference2008/html/programme-eng.htm

- AOC'08
- WONS'08
- COMSWARE '07
- Eighth International Conference on Personal Wireless Communications (PWC'2003)
- IEEE INFOCOM'92,'93,'96, '97, '01
- Second International Workshop on Quality of Future Internet Services (QofIS'2001)
- 2001 International Workshop on Digital Communications (IWDC'2001)
- 2000 International Zurich Seminar on Broadband Communications
- International Conference on Telecommunications (ICT'98)
- IEEE MILCOM'98
- IEEE Conference on Protocols for Multimedia Systems – Multimedia Networking (PROMS-MmNet'97)
- International IFIP Workshop on Performance Modeling and Evaluation of ATM Networks, 1996
- IEEE ICUPC'96
- 1996 ITC Mini-Seminar
- 1996 SPIE International Conference on Voice, Video, and Data Communications
- IEEE ICC'94 &'95
- TRICOMM'93
- IEEE GLOBECOM'93

Research Proposal Evaluation

- 2017 – EU proposal of CAPS Program (Collective Awareness Platforms)
- 2015 – Research proposal evaluator for the Russian Science Foundation
- 2015 – Research proposal evaluator for the Serbian Ministry of Education and Science.
- 2014 – Research proposal evaluator for the Russian Science Foundation
- 2013 – EU-Japan Research proposal evaluation reviewer/panellist.
- 2013 -- Research proposal reviewer for the IST-FET Open Programme (also in 2012, 2011, 2010, 2009, 2008, 2006, 2004, 2002, 2000)
- 2012/ – FET Young Research proposal evaluation reviewer/panellist.
- 2012 – Research proposal evaluation reviewer/panellist and member of hearings for the IST Programme, 7th Framework, Network of the Future Objective (1.1)
- 2012 - Research proposal reviewer for the FWO, Brussels, Belgium (also in 2011, 2000, 1997)
- 2011 – Research proposal evaluation reviewer/panellist and member of hearings for the IST Programme, 7th Framework, FIRE (Future Internet Research and Experimentation) Initiative
- 2010 – Research proposal evaluator for the Serbian Ministry for Science and Technological Development
- 2010 – Research proposal evaluator for the New Eurasia Foundation, Russian call "Measures to Attract Leading Scientists to Russian Educational Institutions".
- 2009 - Research proposal evaluation reviewer/panellist for the USA National Science Foundation (also in 12/1993, 12/1996, 2/2000, 5/2000, 12/2000, 5/2001, 6/2002, 5/2004, 6/2004, 5/2005, 5/2006, 6/2006).
- 2009 - Research proposal evaluation reviewer/panellist and member of hearings for the IST Programme, 7th Framework, Network of the Future Initiative (5/2009)
- 2007 - Research proposal reviewer for the Open University of Cyprus
- 2007 - Research proposal evaluation reviewer/panellist for the IST Programme, 7th Framework, FIRE (Future Internet Research and Experimentation) Initiative (11/2007)
- 2007 - Research proposal evaluation reviewer/panellist for the IST Programme, 7th Framework, Network of the Future Initiative (6/2007)
- 2005 - Research proposal evaluation for the General Secretariat for Research and Development, Ministry of Development of Greece (also in 2003)

- 2004 - Research proposal evaluation reviewer/panellist for the IST Programme, 6th Framework (also in 2003)
- 2002 - Research proposal evaluation reviewer/panellist for the IST Programme, 5th Framework
- 1996 - Research proposal reviewer for the Louisiana Board of Regents

Research Project Evaluation

- EU Research project evaluator: 2015 (1 project) 2013 (2 projects), 2012 (2 projects), 2010 (2 projects), 2009 (2 projects), 2008, 2006, 2005