

Dr. Alexandros Kaloxylos

Current Position

- Assistant Professor, Department of Telecommunications Science and Technology, University of Peloponnese

Education

University of Athens - Greece

Ph.D. - Department of Informatics & Telecommunications

Thesis Title: “Location Management in Wireless ATM Networks”

Duration: November 1995 - May 1999

Date of Award: 12 May 1999

Scholarship: co-funding of General Secretary of Research and Technology and Greece and INTRAKOM S.A.

Heriot-Watt University, Edinburgh - Scotland

M.Phil. - Electrical and Computer Engineering

Thesis Title: “ESTOPRO – An Estelle to PROMELA Compiler”

Duration: September 1993 – August 1994

University of Crete, Heraklion

B.Sc. Department of Computer Science

Duration: September 1989 – June 1993

Foreign Languages

Excellent knowledge of English, French and Greek.

Teaching Experience

During 2000-2002, I was a visiting Lecturer at the University of Athens (Dept. of Informatics and Telecommunications) and during 2002-2004 a visiting assistant Professor at the University of Peloponnese (Dept. of Telecommunications Science and Technology). Since 2002, I work at the University of Peloponnese. During these years I have given lectures in a series of subjects at undergraduate and postgraduate level, such as: Introduction to Computer Science and Telecommunications, Wireless and Mobile Networks, Telecommunication Networks, Formal Specification and Verification of Protocols, Advanced course on wireless and mobile computing, Techno-economics for Broadband Networks. I have participated in the supervision of several Ph.D. Students and more than 30 Ms.C. and undergraduate students.

Research Experience

Since 1994, I have participated in several European and national initiative research projects. (METIS, METIS-II, 5G-Xhaul, FI-PPP FISPAC, IP – Univerself, PPP Smart-Agrifood, IST CONSERN, RIWCoS – Reconfigurable Interoperability of Wireless

Communications Systems, IST Self-NET, IP E3 End to End Efficiency, IP “End-to-End Reconfigurability – E2R”, Network of Excellence ANWIRE, IST project MOBIVAS - “Downloadable MOBILE Value Added Services through software radio & switching integrated platforms”, ACTS project RAINBOW “Radio Access Independent Broadband On Wireless”, ACTS project The Magic WAND “Radio Access Independent Broadband On Wireless”. As a researcher I have worked at the Foundation of Research and Technology – FORTH Crete, the University of Wales in Aberystwyth, the University of Athens and the University of Peloponnese.

Research Interests

- Mobile and Wireless Networks,
- 5G cellular networks,
- V2X Communications
- Network Management
- Building Cloud applications for future Internet services

Professional Experience

- **2014-2016:** Principal Researcher Huawei Technologies, German Research Center, Head of the Dario Access Network Department
- **2002 - 2004:** Responsible for the design, deployment and operation of the Network Operation Center for the University of Peloponnese. Our network spans over 5 different cities.
- **2001 - 2003:** Member of the core team of GUnet (Greek Universities Networks). This is a non for profit organization that coordinated the improvement of the access networks of all Greek Universities and the design of new advanced e- services.
- **1990-1993:** Member of the Network Operation Center at the University of Crete – Heraklion, where I was acting as the coordinator of a group of undergraduate students.

Publications in international journals and books

I have published more than 130 publications in international journals and conferences and I have received more than 1400 citations (Scholar google). The full list of publications can be found in my web site <http://www.uop.gr/~kaloxyl> and is also copied below.

Book Chapters

1. E. Zervas, A. Kaloxylos and L. Merakos, “LAMPS: Location Agents and Mobile -PNNI Scheme”, Appeared in the book "Advances in Informatics", edited by D.I.

- Fotiadis, S.D. Nikolopoulos and published by World Scientific, 1999, ISBN 981-02-4192-5
2. M. Koutsopoulou, S. Panagiotakis, N. Alonistioti, A. Kaloxylou, "Customized billing for location based services", Lecture notes in Computer Science, Springer-Verlag GmbH, ISSN 0302-9743, Volume 3542/2005, paper selected from IFIP DAIS conference (Distributed Applications and Interoperable Systems), Athens 2006.
 3. G. Lambropoulos, N. Passas, A. Kaloxylou and L. Merakos, "Managing Handovers in Integrated WLAN/Cellular Networks", book chapter in "The Encyclopedia of Wireless and Mobile Communications" CRC Press, editor: Borko Funkt, ISBN 1-420-04326-9, December 2007
 4. A. Kaloxylou, G. Modeas, N. Passas and G. Lampropoulos, "Radio Resource Management in 4G Mobile Systems", book chapter in "The Encyclopedia of Wireless and Mobile Communications", CRC Press, editor: Borko Funkt, ISBN 1-420-04326-9, December 2007
 5. D. Triantafyllopoulou, N. Passas, A. Kaloxylou, "Cross-layer design for cooperative wireless communications", book chapter in "Cooperative Wireless Communications", editors Y. Zhang, H. H. Chen and M. Guizani, book chapter in "Cooperative Wireless Communications", CRC Press, editors: Y. Zhang, H. H. Chen and M. Guizani, ISBN: 142006469X, March 2009.
 6. A. Kaloxylou, S. Paskalis, D. Vali, A. Boucouvalas, "Mobility Management and QoS Support in Wireless Environments: Trends and Open issues", Wireless Network Traffic and Quality of Service Support: Trends and Standards, IGI Global edited by Dr. Thomas D. Lagkas, Prof. Pantelis Angelidis, and Prof. Loukas Georgiadis, 2010
 7. Laurent Ciavaglia, Zwi Altman, Eleni Patouni, Alexandros Kaloxylou, et al., "Coordination of Self-Organizing Network Mechanisms: Framework and Enablers", Mobile Networks and Management Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering Volume 97, 2012, pp 174-184 (selected from the MONAMI 2011 conference), 2012
 8. K. Chatzikokolakis, P. Spapis, M. Stamatelatos, G. Katsikas, R. Arapoglou, A. Kaloxylou, N. Alonistioti, "Spectrum Aggregation in Cognitive Radio Access Networks from power control perspective", book chapter in "Evolution of cognitive networks and self adaptive communication systems", IGI Global edited by Dr. Thomas Lagkas, 2013
 9. K. Chatzikokolakis, A. Kaloxylou, et. al, "On the Way to Massive Access in 5G: Challenges and Solutions for Massive Machine Communications", Cognitive

Radio Oriented Wireless Networks, Springer also published in IEEE CrownCom 2015

10. A. Kaloylos et. al., “Network Slicing”, to appear in 5G System Design - Architectural and Functional Considerations and Long Term Research, Wiley
11. M. Gramaglia, A. Kaloylos et. al., “E2E Architecture”, to appear in 5G System Design - Architectural and Functional Considerations and Long Term Research, Wiley

International Journals

1. A. Kaloylos, P. Keshavamurthy, P. Spapis, C. Zhou, Context aware control schemes for the performance improvement of V2X Network Slices, accepted for publication, International Journal of Advances in Telecommunications, v11, n1&2, 2018
2. A. Kaloylos, A survey and an analysis of network slicing in 5G networks, IEEE Standards Magazine, vol 2, Issue 1, March 2018
3. P. Magdalinos, S. Barbounakis, P. Spapis, A. Kaloylos, G. Kyprianides, N. Alonistioti, C. Zhou, A context extraction and profiling engine for 5G network resource mapping, accepted for publication in Computer Communications, 2017
4. S. Barbounakis, A. Kaloylos, P. Spapis, N. Alonistioti, Context-aware, user-driven, network-controlled RAT selection for 5G networks, Computer Networks, Vol 113, 2017
5. G. Tsoulos, O. Bulakci, D. Zarbouti. G. Athanassiadou, A. Kaloylos, Dynamic Wireless Network Shaping via Moving Cells: The Nomadic Nodes Case, European Transactions in Telecommunications, 2017
6. P. Marsch, I. Da Silva, O. Bulakci, M. Tesanovic. S. El Ayoubi, T. Rosowski, A. Kaloylos, M. Boldi, 5G Radio Access Network Architecture – Design guidelines and key considerations, IEEE Communications Magazine, 2016
7. X. An, C. Zhou, R. Trivisonno , R. Guerzoni, A. Kaloylos, D. Soldani and A. Hecker, On end to end network slicing for 5G, European Transactions in Telecommunications, 2016
8. K. Chatzikokolakis, A. Kaloylos et., al, A Survey of Location Management Mechanisms and an Evaluation of their Applicability for 5G Cellular Networks, Recent Advances in Communications and Networking Technology, Vol 3, 2016

9. S. Barbounakis, A. Kaloxylos et. al., "Management and Control applications in Agriculture domain via a Future Internet Business-to-Business Platform", Information Processing in Agriculture, 2015
10. K. Chatzikokolakis, P. Spapis, A. Kaloxylos, N. Alonistioti, "Towards spectrum sharing: Opportunities and technical enablers", accepted for publication in IEEE Communication Magazine, 2015
11. P. Magdalinos, A. Kaloxylos, N. Alonistioti, "Context Monitoring Optimization in Autonomic Networks", Wireless Personal Communications Magazine, Springer, 2014
12. A. Kousaridas, P. Magdalinos, A. Kaloxylos, N. Alonistioti, et al., "Integrating the Self-Growing Concept in a Self-Organizing Wireless Network for Topology Optimization", International Journal of Network Management, 2014
13. A. Kaloxylos et al, "A cloud based farm management system: Architecture and implementation", Elsevier Computers and Electronics in Agriculture, 2014
14. K. Tsagkaris, G. Nguengang, A. Galani, I. Gridabenyahia, M. Ghader, Alex Kaloxylos et al., "A survey of autonomic networking architectures: towards a Unified Management Framework", International Journal of Network Management, Wiley Publishers, October 2013
15. I. Modeas, A. Kaloxylos, L. Merakos, "UDS: a Distributed RAT Selection Mechanism for Heterogeneous Wireless Networks" Wireless Personal Communications, Springer publications, November 2012
16. A. Kaloxylos et al, "Farm management systems and the Future Internet era", Elsevier Computers and Electronics in Agriculture, November 2012
17. K. Nolte, A. Kaloxylos, K. Tsagkaris et al., "The E3 Architecture: Enabling future wireless cellular networks with cognitive and self-x capabilities", (Wiley – Blackwell) International Journal of Network Management, 2011
18. A. Kaloxylos, I Modeas, F. Georgiadis, N. Passas, "Network Selection Algorithm for Heterogeneous Wireless Networks: from Design to Implementation", Journal of Network Protocols and Algorithms, 2009
19. I. Modeas, A. Kaloxylos et al, "Radio Access Selection in integrated UMTS/WLAN networks", International Journal of Communications, Network and System Sciences (IJCNS) vol. 2, no. 9, pp. 805-821, December 2009.
20. D. Triantafyllopoulou, N. Passas, A. Kaloxylos, and L. Merakos, "Coordinated Handover Initiation and Cross-Layer Adaptation for Mobile Multimedia Systems", *IEEE Transactions on Multimedia*, special issue on "Quality-Driven

Cross-Layer Design for Multimedia Communications", vol. 11, no. 6, pp. 1131-1139, October 2009.

21. A. Kaloxylos, M. Stamatelatos, A. Boucouvalas, "Mobility Management for Reconfigurable Terminals in Heterogeneous Networks", *Mediterranean Journal of Computers and Networks*, special issue on Recent Advances in Heterogeneous Cognitive Networks, 2008
22. D. Triantafyllopoulou, N. Passas, A. Salkintzis, and A. Kaloxylos, "A Heuristic Cross-Layer Mechanism for Real-Time Traffic over IEEE 802.16 Networks", *Wiley's International Journal of Network Management*, special issue on "Management Solutions for QoS Support over the Entire Audio-Visual Service Distribution Chain", 7 Aug 2007
23. G. Lampropoulos, N. Passas, A. Kaloxylos, and L. Merakos, "A Flexible UMTS/WLAN Architecture for Improved Network Performance", *Springer Wireless Personal Communications Journal*, special issue on "Seamless Handover in Next Generation Wireless Mobile Networks", scheduled for April 2007.
24. M. Koutsopoulou, A. Kaloxylos, N. Alonistioti, L. Merakos, "A platform for charging, billing & accounting in future mobile networks", *Elsevier Computer Communications Journal*, Special Issue, on Emerging Middleware for Next Generation Networks In Press, Corrected Proof, Available online 19 January 2006.
25. A. Kaloxylos, G. Lampropoulos, N. Passas, "A Flexible Mechanism for Service Continuity in 4G Environments", *Elsevier Computer Communications Journal*, special issue on "End-to-end QoS Provision Advances" Volume 29, Issue 6, Pages 717-729, 31 March 2006.
26. G. Lampropoulos, A. Kaloxylos, N. Passas, Lazaros Merakos "Handover Management Architectures in Integrated WLAN/Cellular Networks", *IEEE Communications Surveys and Tutorials*, Fourth Quarter 2005 Vol.7 No.4.
27. D. Vali, S. Paskalis, A. Kaloxylos, L. Merakos, "A Survey on QoS Signaling", *IEEE Communications Surveys and Tutorials*, Vol.6 No.4 Fourth Quarter 2004.
28. M. Koutsopoulou, A. Kaloxylos, et al, "Charging, Accounting & Billing Management in Mobile Telecommunication Networks and the Internet", *IEEE Communications Surveys and Tutorials*, Vol 6, No 1, 2004.
29. N. Passas, S Paskalis, A. Kaloxylos et al, "Enabling Technologies for the always best connected concept", *Wireless Communications and Mobile Computing Journal*, Wiley Interscience, Q1, 2004.

30. M. Koutsopoulou, A. Kaloxylos, N. Alonistioti, P. Philipopoulos, “An integrated Charging, Accounting & Billing management platform for the support of innovative business models in Mobile Networks” International Journal of Mobile Communications, Vol2 No4, 2004.
31. S. Paskalis, A. Kaloxylos, E. Zervas, L. Merakos, “An efficient RSVP-Mobile IP Interworking Scheme”, Mobile Networks and Applications Journal (MONET), June 2003.
32. A. Kaloxylos, E. Zervas, L. Merakos, “Location Management in Wireless ATM Customer premises Networks”, Computer Communications Journal, Special Issue on Recent Advances In Mobile Communication Networks, Vol. 23, No 5, March 2000.
33. E. Zervas, A. Kaloxylos, L. Merakos, “An Efficient Location Management Protocol for Wireless ATM Customer Premises Networks”, Mobile Networks and Applications Journal (MONET), Special Issue in Management of Mobility in Distributed Systems, Vol. 6, Issue 2, March 2001.
34. A. Kaloxylos, H. Hansen, L. Merakos, “Mobility Management for Large Private Wireless ATM Installations”, ACM Mobile Communication Review Vol. 3, No 1, January 1999.
35. A. Kaloxylos, S. Hadjiefthymiades and L. Merakos, “Mobility Management and Control Protocol for Wireless ATM Networks”, IEEE Network Magazine, Special Issue on PCS Network Management, May 1998.

Conferences

1. A. Kaloxylos, “Application of Data Mining in the 5G Network Architecture”, the Thirteen International Conference on Digital Communications, ICDT 2018, Athens, Greece
2. Sandra Roger, David Martín-Sacristán, David Garcia-Roger, Jose F. Monserrat, Panagiotis Spapis, Chan Zhou and Alexandros Kaloxylos, “Forced Inter-Operator Handover for V2X Communication in Multi-operator Environments with Regional Splitting”, IEEE International Symposium on Broadband Multimedia Systems and Broadcasting, Valencia, 2018
3. P. Spapis, C. Zhou, A. Kaloxylos, On V2X Network Slicing: Using Context information to improve mobility management, INNOV 2017, Athens Greece – **Best paper award**
4. A. Kaloxylos, “Network slicing for 5G networks: A survey and an analysis of research trends”, accepted in PCI 2017

5. A. Kaloylos, "LIVA: An efficient local breakout scheme for V2V communications", accepted in PCI 2017
6. G. Tsoulos, O Bulakci, D. Zarbouti, G. Athanasiadou, A. Kaloylos, Performance of Vehicular Nomadic Node Operation in Realistic Multicellular Wireless Networks, accepted IEEE VTC 2017
7. Oemer Bulakci, Alexandros Kaloylos, Joseph Eichinger, Chan Zhou, RAN Moderation in 5G Dynamic Radio Topology, accepted IEEE VTC 2017
8. Taylan Sahin, Oemer Bulakci, Panagiotis Spapis, Alexandros Kaloylos, Flexible Network Deployment in 5G: Performance of Vehicular Nomadic Nodes, accepted IEEE VTC 2017
9. I. Da Silva, G. Mildh, A. Kaloylos et al, Impact of Network Slicing on 5G Radio Access Networks, EuCNC 2016
10. Chan Zhou, Malte Schellmann, Egon Schulz, Alexandros Kaloylos, "Building versatile network upon new waveforms", ETSI WORKSHOP ON FUTURE RADIO TECHNOLOGIES – AIR INTERFACES, 27-28 January 2016, Sophia Antipolis France
11. K. Chatzikokolakis, A. Kaloylos, P. Spapis, C. Zhou, O. Bulakci, N. Alonistioti, "Context Aware location management of groups of devices in 5G Networks", IFIP International conference on autonomous infrastructure management and security, AIMS 2016, Munich, Germany
12. Chatzikokolakis K. ; Spapis P.; Kaloylos A.; Beinas G.; Alonistioti N.; "Spectrum sharing: A coordination framework enabled by fuzzy-logic," International Conference on Computer, Information and Telecommunication Systems (CITS), 15-17 July 2015
13. Stamatelatos, M., Kaloylos, A., Paraskevopoulos, A. Alonistioti, N.: A Generic Scheme and a Validation Model for SON Coordination in 5G Networks. The 6th International Conference on Information, Intelligence, Systems and Applications (IISA), (2015).
14. P. Marsch, O. Queseth, S. E. Elayoubi, M. Maternia, M. Uusitalo, R. Ruismaki, M. Tesanovic, A. Kaloylos, I. da Silva, M. Boldi, "5G Radio Access Network Design - A Brief Overview on the 5G-PPP Project METIS-II", EUCNC 2015
15. Panagiotis Spapis, Konstantinos Chatzikokolakis, Alexandros Kaloylos and Nancy Alonistioti, "Using SDN as a key enabler for co-primary spectrum sharing", 5th International Conference on Information, Intelligence, Systems and Applications, IISA 2014

16. Sokratis Barmpbounakis, Panagiotis Spapis, Nancy Alonistioti, Alexandros Kaloxylou, "Compass: A context-aware, user oriented RAT selection mechanism in heterogeneous wireless networks", IARIA MOBILITY 2014
17. Alexandros Kaloxylou, Sokratis Barmpbounakis, Panagiotis Spapis, Nancy Alonistioti, "An efficient RAT selection mechanism for 5G cellular networks", International Wireless Communications and Mobile Computing Conference, IWCMC 2014
18. M. Stamatelatos, I. Grida Ben Yahia, P. Peloso, B. Fuentes, K. Tsagkaris, A. Kaloxylou, "Information Model for managing autonomic functions in future networks", MONAMI 2013, Ireland
19. A. Kaloxylou et al., "The use of future Internet technologies in the Agriculture and food Sectors: Integrating the supply chain", HAICTA 2013
20. J.W. Kruize, H. Scholten, A. Kaloxylou, T. Veenstra, J Wolfert, A.J.M. Beulens, "Towards a Design of a Generic Integration Framework for Agri-Food Supply Chain Networks", EFITA 2013, Turin, Italy
21. M. Emmelmann, B. Bochow, A. Makris, A. Kaloxylou, G. Koudouridis, N. Alonistioti, "The self-growing concept as a design principle of cognitive self-organization" IEEE Globecom 2012, Workshop MENS, California, USA
22. E. Kosmatos, A. Kaloxylou, N. Tzavalas, N. Alonistioti, "Network and service co-management addressing QoE and optimised resource allocation", IEEE CAMAD 2012, Barcelona Spain
23. A. Galani, P. Demestichas, G. Nguengang, I. Gridabenyahia, M. Stamatelatos, E. Kosmatos, A. Kaloxylou, L. Ciavaglia, "Core functional and network empower mechanisms of an operator-driven, framework for unifying autonomic network and service management", IEEE CAMAD 2012, Barcelona Spain
24. L. Cavaglia, Z. Altman, E. Patouni, A. Kaloxylou et. al, "Coordination of Self-Organizing network mechanisms: Framework and Enablers", 3rd International ICST Conference on Mobile Networks and Management, MONAMI 2011, Aveiro, Portugal
25. A. Merentitis, A. Kaloxylou, M. Stamatelatos, N. Alonistioti, "Optimal Periodic Radio Sensing and Low Energy Reasoning for Cognitive Devices", IEEE Melecon 2010,
26. A. Kaloxylou, F. Georgiadis, I. Modeas, N. Passas, "Design and Implementation of a Radio Access Selection Algorithm for multi-mode mobile terminals", 1st International ICST Conference on Mobile Networks and Management, MONAMI 2009, Athens Greece

27. A. Kalokylos, G. Xenakis, D. Makris, I. Gonianakis, "Implementation of a SIP extension to enable a more efficient communication Control", PCI2009, Corfu, Greece
28. A. Kalokylos et al, "The E3 Architecture for future cognitive mobile networks" IEEE PIMRC 2009, Tokio Japan
29. D. Triantafyllopoulou, N. Passas, and A. Kalokylos, "Integration of Handover in a Cross-Layer Mechanism for Mobile Multimedia Systems", accepted in the IEEE International Communications Conference (ICC) 2009, Dresden, Germany, June 2009.
30. Valentin Rakovic, Ognjen Ognenoski, Alexandros Kalokylos, Anthony Boucouvalas, Vladimir Atanasovski, Liljana Gavrilovska, "A RAT Selection Mechanism in Emergency Scenarios", Wireless VITAE, Aalborg, Denmark, 17-20 May 2009
31. Alexandros Kalokylos, Anthony Boucouvalas, "Extending SIP to handle communications in emergency situations", Wireless VITAE, Aalborg, Denmark, 17-20 May 2009
32. P. Magdalinos, A. Kalokylos, Z. Boufidis, J. Gebert, T. Rosowski, E. Bogenfeld, K. Tsagkaris, and K. Nolte, "Functional Architecture for Cognitive Wireless Systems in the B3G World", to appear in Proc. ICT Mobile and Wireless Commun. Summit 2009, Santander, Spain, June. 2009
33. A. Kalokylos, G. Gonianakis, D. Makris "Extending SIP to enable a more efficient multimedia session control in future networks", ACM WMuNep 2008, Vancouver, Canada
34. A. Kalokylos, M. Stamatelatos, A. Boucouvalas, "Enabling Technologies for Mobility Management in Heterogeneous Networks", 7th International Conference Communications 2008, Bucharest, Romania 2008
35. D. Triantafyllopoulou, N. Passas, A.K. Salkintzis, and A. Kalokylos, "Joint Application and Physical Layer Adaptation for Improved performance in IEEE 802.16e Networks", special session Cross-layer designs for wireless pervasive computing, ISWPC 2008
36. D. Triantafyllopoulou, N. Passas, and A. Kalokylos, "Cross-Layer Adaptation for Real-Time Broadband Multimedia over IEEE 802.16e Networks", IEEE Broadband Multimedia Symposium, Las Vegas 2008.
37. I. Modeas, A. Kalokylos, N. Passas, and L. Merakos, "An Algorithm for Radio Resources Management in Integrated Cellular/WLAN Networks", Proc. IEEE

- International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC) 2007, Athens, Greece, September 2007.
38. G. Lampropoulos, A. Kaloxylos, N. Passas, and L. Merakos, "A Power Consumption Analysis of Tight-Coupled WLAN/UMTS Networks", Proc. IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC) 2007, Athens, Greece, September 2007.
 39. D. Triantafyllopoulou, N. Passas, A.K. Salkintzis, and A. Kaloxylos, "A Heuristic Cross-Layer Mechanism for Real-Time Traffic in IEEE 802.16 Networks", Proc. IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC) 2007, Athens, Greece, September 2007.
 40. D. Triantafyllopoulou, N. Passas, A. Kaloxylos, "A cross-layer optimisation mechanism for multimedia traffic over IEEE802.16 Networks", 13th European Wireless Conference, Paris France, 2007.
 41. A. Schieder, E. Tragos, A. Mihailovic, A. Kaloxylos, et al, "Mobility Management and Radio Resource Management in the WWI System architecture", Proceedings of the 17th WWRF meeting Heidelberg, Nov 2006
 42. G. Lampropoulos, A. Kaloxylos, N. Passas, L. Merakos, "A seamless service continuity scheme for enhanced network performance in UMTS/WLAN Networks", IEEE PIMRC 2006.
 43. A. Kaloxylos et. al, "Mobility Support for a QoS Aggregation Protocol", Fifth International Symposium on Communication Systems, Networks and Digital Signal Processing, 19-21 July 2006 Patra Greece.
 44. Karim El-Khazen, Didier Bourse, Makis Stamatelatos, Alex Kaloxylos, Konstantina Kominaki, "Viable Business Roles towards Reconfigurable Business Eco-Systems", IST Mobile Summit 2006.
 45. N. Alonistioti, A. Kaloxylos, A. Maras: "Mobility management for beyond 3G reconfigurable systems". ICETE 2005, Proceedings of the Second International Conference on e-Business and Telecommunication Networks, Reading, UK, October 3-7, 2005. INSTICC Press 2005, ISBN 972-8865-32-5
 46. G. Lambropoulos, N. Passas, A. Kaloxylos, L. Merakos, "Connection-based Mobility Management for Seamless Service Continuity in Heterogeneous", First International Workshop on Convergence of Heterogeneous Wireless Networks, July 10, 2005 in Budapest, Hungary
 47. M. Koutsopoulou, S. Panagiotakis, A. Alonistioti, A. Kaloxylos, "Middleware platform for the support of charging reconfiguration actions", 2nd International

Workshop on Next Generation Networking Middleware (NGNM05), Waterloo, Canada, May 2005

48. M. Koutsopoulou, S. Panagiotakis, A. Alonistioti, A. Kaloxylos, "Customised Billing for Location-based Services", 5th IFIP International Conference on Distributed Applications and interoperable systems (DAIS 2005), Athens, Greece, June 2005, also appeared in Lecture Notes in Computer Science, Publisher: Springer-Verlag GmbH, ISSN: 0302-9743, Volume 3543/2005
49. N. Alonistioti, S. Panagiotakis, A. Kaloxylos, "A framework for dynamic and context aware composition of adaptable mobile services", Third International conference on computer science, software engineering, information technology, e-business and applications, Cairo, Egypt 2004
50. M. Koutsopoulou, A. Kaloxylos, A. Alonistioti, L. Merakos "A Platform for Charging, Billing & Accounting in Future Mobile Networks", 1st International Workshop on Next Generation Networking Middleware (NGNM04), Athens, Greece, May 2004
51. N. Alonistioti, A. Glentis, F. Foukalas, A. Kaloxylos, "RMP: Reconfiguration Management Plane for the support of policy based network reconfiguration", PIMRC 2004, Barcelona, Spain, September 2004
52. F. Marx, S. Hope, A. Delautre, E. Buracchini, P. Gorla, A. Trogolo, M. Stamatelatos, N. Alonistioti, A. Kaloxylos, G. Vivier, K. El-Khazen, M. Alvarez, "System Scenarios of End-to-End Reconfigurability", SDR Forum Technical Conference, 15-18.11.04, Phoenix, USA.
53. S. Hope, F. Marx, M. Arndt, A. Delautre, E. Buracchini, P. Gorla, A. Trogolo, M. Stamatelatos, N. Alonistioti, A. Kaloxylos, G. Vivier, K. El-Khazen, M. Alvarez, "End-to-End Reconfigurability System Scenarios", Wireless World Research Forum (WWRF), 11th Meeting, WG6 (10-11.06.04)
54. N. Alonistioti, N. Passas, A. Kaloxylos, et al "Business Model and Generic Architecture for Integrated Systems and Services: The ANWIRE Approach", Wireless World Research Forum, March 2004 Beijing
55. M. Stamatelatos, N. Alonistioti, A. Kaloxylos, K. Kafounis, P. Magdalinos, "Business Model and Actors for End to End Reconfigurable Systems", 11th meeting Wireless World Research Forum, 10-11 June, Oslo, Norway, accepted for publication. 11th meeting Wireless World Research Forum, 10-11 June, Oslo, Norway.
56. A. Delautre, JE. Goubard, N. Alonistioti, M. Stamatelatos, A. Kaloxylos, P. Leaves, G. Vivier, M. Alvarez, "Review of SDR: past, present and future

- initiatives”, Wireless World Research Forum (WWRF), 11th Meeting, WG6 (10-11.06.04)
57. N. Alonistioti, Z. Boufidis, A. Kaloxylos, M. Dillinger, “Integrated Management Plane for Policy based End to End Reconfiguration Services”, IST SUMMIT 2004, Lyon, France, June 2004
 58. N. Alonistioti, C. Anagnostopoulos, T. Tsounis, A. Kaloxylos, K. El-Khazen, G. Vivier, D. Nussbaum, A. Gozes, A. Delautre, J.-E. Goubard, “Evolution of E2R Prototyping Environment”, IST SUMMIT 2004, Lyon, France, June 2004
 59. M. Koutsopoulou, A. Kaloxylos, A. Alonistioti, L. Merakos, “A Holistic Solution for Charging, Billing & Accounting in 4G Mobile Systems”, IEEE VTC Spring 2004
 60. M. Koutsopoulou, A. Kaloxylos, A. Alonistioti, L. Merakos, “A generic Framework for the management of charging billing and accounting process in heterogeneous networks”, IRMA 2004, New Orleans
 61. M. Koutsopoulou, S. Panagiotakis, Z. Boufidis, N Alonistioti and A. Kaloxylos, “Charging, Billing & Accounting in a multi-Operator and multi-Service Provider Environment”, ANWIRE ,Workshop on Reconfigurability, Mykonos Greece September 2003.
 62. D Vali, S. Paskalis, A. Kaloxylos, L. Merakos “An Efficient Micro-Mobility Solution for SIP Networks”, IEEE GLOBECOM 2003, San Fransisco USA
 63. D Vali, S. Paskalis, A. Kaloxylos, L. Merakos “A SIP based method for intra domain handoffs”, IEEE Semi-annual Vehicular Technology Conference-VTC October 6-9, 2003
 64. M. Koutsopoulou, A. Kaloxylos, A. Alonistioti, “An integrated management platform for the support of advanced Charging Accounting & Billing schemes in Reconfigurable Mobile Networks”, 12th IST Summit on Mobile and Wireless Communications, Aveiro, Portugal, June 2003.
 65. S. Paskalis, A. Kaloxylos, E. Zervas, “Evaluating the RSVP Mobility Proxy Concept”, PIMRC 2002, Lisboa
 66. S. Panagiotakis, M. Koutsopoulou, A. Alonistioti, A. Kaloxylos, “Generic Framework for the Provision of Efficient Location-based Charging over Future Mobile Communication Networks”, IEEE PIMRC 2002, Lisboa.
 67. M. Koutsopoulou, A. Kaloxylos, A. Alonistioti, “Charging, Accounting and Billing as a Sophisticated and Reconfigurable Discrete Service for next Generation Mobile Networks”, IEEE VTC Fall 2002.

68. M. Koutsopoulou, N. Alonistioti, E. Gazis, A. Kaloxylos, "Adaptive Charging Accounting and Billing system for the support of advanced bussiness models for VAS provision in 3G systems", IEEE PIMRC 2001, San Diego California
69. S. Paskalis, A. Kaloxylos, E. Zervas, "An efficient QoS scheme for mobile hosts", Local Computer Networks, 2001. Proceedings. LCN 2001. 26th Annual IEEE Conference on 14-16 Nov. 2001 Page(s):630 - 637 Digital Object Identifier 10.1109/LCN.2001.990844.
70. M. Koutsopoulou, V. Gazis, A. Kaloxylos, "A novel billing scheme for UMTS networks", International Symposium, 3rd Generation Infrastructure and Services, 2-3 July 2001, Athens, Greece
71. E. Gazis, M. Koutsopoulou, C. Farmakis, A. Kaloxylos, "A flexible Charging and Billing Approach for the emerging UMTS Network Operator Role", Applied Telecommunication Symposium (ATS), Seattle, Washington, April 2001.
72. S. Hadjiefthymiades, A. Kaloxylos, G. Papageorgiou and L. Merakos, "Design, Implementation and Testing of a Mobility Management Protocol for Wireless ATM Networks", IEEE International Workshop on Wireless Mobile ATM Implementations, San Francisco, June 1999
73. A. Kaloxylos, S. Hadjiefthymiades, L. Merakos, "DNS Extensions to Support Location Management in IP Networks", ACTS Mobile Summit, Sorrento Italy, June 1999.
74. E. Zervas, A. Kaloxylos and L. Merakos, "LAMPS: Location Agents and Mobile -PNNI Scheme", 7th Hellenic Conference on Informatics, Ioannina - Greece, August 1999.
75. A. Kaloxylos, G. Alexiou, S. Hadjiefthymiades, L. Merakos, "Design and Performance Evaluation of a Mobility Management Protocol for Wireless ATM Networks", Proceedings of PIMRC'98, Boston USA.
76. S. Hadjiefthymiades, A. Kaloxylos and L. Merakos, "Mobility Management in the Wireless ATM Network Demonstrator", IEEE ICUPC'98, Florence, Italy.
77. A. Kaloxylos, S. Hadjiefthymiades and L. Merakos, "Signalling Channel Handling in Wirelles ATM Networks", Proceedings of ISCC'98, July 1998, Greece.
78. A. Kaloxylos, G. Dravopoulos and H. Hansen, "Mobility management extensions in the Wireless ATM Network Demonstrator", Proceedings of the ACTS'98 Summit, Rhodes Greece.

79. A. Kaloxylos, G. Papageorgiou, P. Papageorge, L. Merakos, “Smart Buffering Technique for Lossless Handover in Wireless ATM Networks”, ICUPC ’97, San Diego, USA.
80. A. Kaloxylos, S. Hadjiethymiades, “Mobility Management in the Wireless ATM Network Demonstrator (WAND)”, International Workshop on Mobile Communications (IWMC 96), Thessaloniki Greece.
81. H. Hansen, J. Immonen, S. Hadjieftymiades and A. Kaloxylos, “Description of the Handover Algorithm for the Wireless ATM Network Demonstrator (WAND)”, Proceedings ACTS Mobile Telecommunications Summit, Granada, Spain, 1996.
82. Thomas Kuehnel, Paul Wu, N.Passas, N. Loukas, A. Kaloxylos, “Alternatives of Signalling Channel Allocation in Wireless ATM Networks”, International Workshop on Mobile Communications (IWMC 96), Thessaloniki Greece.

Conferences (Invited paper)

1. A. Alonistioti, S. Panagiotakis, N. Houssos, A. Kaloxylos, “Issues for the provision of Location-dependent services over 3G networks”, International Symposium, 3rd Generation Infrastructure and Services, 2-3 July 2001, Athens, Greece
2. P. Philippopoulos, A. Kaloxylos, T. Dagiuklas, “3G Network & Service Provision Architecture Evolutions”, International Symposium, 3rd Generation Infrastructure and Services, 2-3 July 2001, Athens, Greece
3. K. Chatzikokolakis, A. Kaloxylos, et. al, “On the Way to Massive Access in 5G: Challenges and Solutions for Massive Machine Communications”, IEEE CrownCom 2015

Other Publications

1. 5G PPP Architecture WG, View on 5G Networks, July 2016
2. P. Marsch et. al, METIS View on the 5G RAN architecture, NORMA Summer School, 2016
3. S. Paskalis, A. Kaloxylos, L. Merakos, E. Zervas, “RSVP Mobility Proxy”, draft-paskalis-rsvmp-00.txt, 15 December 2001.
4. Ομάδα Εργασίας για την Ευρυζωνική Πρόσβαση, “Κείμενο Στρατηγικής για την Ευρυζωνική Πρόσβαση”, ΥΠΟΟ, Ειδική Γραμματεία για την ΚτΠ, Ιούνιος 2002 www.broad-band.gr.

5. Troulos, C., Primpas, D., Scopoulis, Y., Karounos, T., Kaloxylas, A., Papadopoulos, P., “Fiber to the Home/Fiber to the Building: Developments and policy recommendations for Greece (2008)” FTTH/FTTB Workgroup Deliverable, διαθέσιμο στο www.ebusinessforum.gr

Submitted publications

1. Konstantinos Chatzikokolakis, Panagiotis Spapis, Alexandros Kaloxylas, George Beinas, Nancy Alonistioti, “Fuzzy-logic enabled spectrum sharing for 5G mobile networks” submitted to Wireless Personal Communications
2. A. Kaloxylas, P. Keshavamurthy, P. Spapis, C. Zhou, “Context Aware control schemes for performance improvement of V2X Network Slices”, submitted to Tele18v11n12 IARIA Journal
3. Roger Sandra, Martín-Sacristán David, Garcia-Roger David, Monserrat Jose, Spapis, Panagiotis, Kousaridas Apostolos, Ayaz Serkan; Kaloxylas Alexandros, “Low-Latency Layer-2 Based Multicast Scheme for Localized V2X Communication” submitted to IEEE Intelligent Transportation Systems Transactions

Other Information

- Senior Member of IEEE
- Editorial Board Member IEEE Surveys and tutorials since 2006
- Future star award for my performance in Huawei GRC
- Huawei GRC Collective First Prize to the team members establishing the 5GAA and the 5G vehicular network eco-system
- Huawei GRC award for the performance in the METIS project
- Workshop organized, 5GArch 2017: 4th International Workshop on 5G Architecture, ICC 2017
- Panelist on 5G networks, EuCNC 2016
- Teaser Speaker, 5G Networks and Services, CONFIG Workshop 2016, Lisbon
- Keynote speaker IEEE ICC 2015 in London, Workshop on heterogeneous converged networks, “5G-RAN: Fine-tuning the protocol stack for vertical industries”

- Technical Program Committee member
- Special Track on Computer Networks - ACM Symposium on Applied Computing (SAC-CN 2004), E2R Workshop on Reconfigurable mobile systems and networks beyond 3G, collocated with PIMRC-2004 Barcelona, DAIS 2005, MediaWiN 2006, 1st ANWIRE workshop, Pan-Hellenic Conference of Informatics 2007, Third ACM International Workshop on Wireless Multimedia Networking and Performance Modeling (WMuNeP'07), Fourth ACM International Workshop on Wireless Multimedia Networking and Performance Modeling (WMuNeP'08), PIMRC 2008, PIMRC 2009, ACM WMNC 2009, PCI 2009, WMuNeP'09, IEEE PIMRC 2009, WICON 2010, PCI 2010, CSNDSP 2010, QPWSN 2010, IEEE PIMRC 2010, PCI 2011, IEEE ISCC 2011, PIMRC-LPAN-2011, IEEE ISSPIT 2011, Videv 2012, CSNDSP2012, PCI2012, ISWCS2012, IEEE AINA 2013. 2nd IEEE Workshop on Video Everywhere (VidEv 2013), PCI 2013, IEEE PIMRC 2013, IWSON2013, ISCC2013, IEEE APWiMob 2014, PCI2015, VTC 2015, ISCC 2015, PIMRC 2015, Videv 2015, IISA 2015, IEEE APWiMob 2015, PIMRC 2016, PIMRC SAB, PIMRC 2016 Mobile and Wireless, ICT 2016, ISCC 2016, APWiMob 2016, ICC 2017, ICT 2017, ISCC 2017, MobiApps 2017
- Session Chairman CSNDSP 2006
- Publicity Chairman International conference PWC '2003 (Personal Wireless Communications)
- Session Chairman IEEE ICUPC'97.
- Member of the Greek Initiative for the deployment of broadband networks in Greece (2001 -2003)
- Member of the coordination committee of the Greek Initiative of volunteers for adapting the One Laptop Per Child Project in Greece
- Coordinator of the Greek e-business forum in issues related to the FTTx in Greece
- Member of the committee in the Ministry of Infrastructures for the deployment of FTTx in Greece

Patents

Since June 2014 I have filed as an employee of Huawei 17 patents related to 5G networks