

HELLENIC REPUBLIC

National and Kapodistrian University of Athens

EST. 1837



Nancy Alonistioti

Associate Professor on Self-managed Mobile and Wireless Networks Sector: Telecommunications Networks

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Academic qualifications

- Ph.D. in Informatics and Telecommunications (1997) Dept. of Informatics and Telecommunications, Univ. of Athens
- B.Sc. in Informatics and Telecommunications (1993) Dept. of Informatics and Telecommunications, Univ. of Athens

Appointments

- Oct 2019 today: Associate professor, Department of Informatics & Telecommunications, University of Athens
- Sept 2013 Oct 2019: Assistant Professor, Department of Informatics & Telecommunications, University of Athens
- Jan 2009 Aug 2013: Lecturer, Department of Informatics & Telecommunications, University of Athens
- Dec 2007 Dec 2008: Lecturer, Department of Informatics & Telecommunications, University of Athens
- Dec 2000 Dec 2001: Expert in Hellenic Telecommunications & Post Commission
- Jan 2002 Dec 2007: Collaborative researcher NKUA
- Mar 1993 Dec 2000: Collaborative Researcher, IIT, NCSR "Demokritos"

Teaching Activities

- Undergraduate courses
 - Network Management / Telecommunications Network Programming Postgraduate courses
 - Advanced topics in Mobile Communications/Protocol Design & Specification 19 Dissertation Thesis

Research Interests/Activities

- Mobile/Wireless Communications (UMTS, Broadband Radio Access Networks, IP networks) and protocol design
- Future Internet
- Autonomic and Cognitive Communications,
- Advanced Mobile Internet Applications and Services
- M2M and Ad-hoc Networking
- Self-Management and Policy based decision making
- Reconfigurability
- Energy Efficient Networking
- Head of the Self-evolving cognitive and autonomic networking group

Scientific Publications/Citations:

- 30 publications in refereed journals (1 IEEE transactions)
- 130 refereed conference publications
- 1 book and 4 book chapters
- More than 1000 citations.

Distinctions

- Member of the Future Internet Steering Committee, Future Internet Assembly, FIRE
- Organizer of the 2nd members' meeting of the IEEE
- P1900.4 Standards Working Group. (Founding and voting member (2006-2007) of the IEEE P1900.4 Standards Working Group for the standardization of the Cognitive Pilot Channel and the parameters related with the exchange of policy and context information for cognitive reconfigurable mobile communications)
- 3GPP TSG-T2 MExE, 24th-26th July, 2001, Athens, Greece: Organization of the MExE Group meeting in Athens and invited speaker for subjects concerning the extension of "classmarking" for 3rd-4th generation mobile terminals
- ICT Group, UMTS Forum, September 2001, Brussels: Invited speaker for subjects concerning flexible charging and protocols offering system policies in 4th generation networks (4G networks)



Top publications

- S. Barmpounakis, G. Tsiatsios, M. Papadakis, et al., "Collision Avoidance in 5G using MEC and NFV: The Vulnerable Road User safety use case", The International Journal of Computer and Telecommunications Networking (Computer Networks Journal), Elsevier, Volume 172, 8 May 2020, 107150, DOI: https://doi.org/10.1016/j.comnet.2020.107150
- S. Barmpounakis, N.Alonistioti, "A survey of existing testbeds for Programmable Networks", Programmable Network Architecture and Protocols, Wiley 5G REF: The Essential 5G Reference Online, by John Wiley & Sons, publication date: December 2019.
- S. Barmpounakis, A. Kaloxylos, P. Spapis, C. Zhou, P. Magdalinos, N. Alonistioti, "Data Analytics for 5G Networks: A complete framework for network access selection and traffic steering", International Journal On Advances in Telecommunications, IARIA, Vol. 11, Issue 3&4, December 2018
- K. Chatzikokolakis, P. Spapis, A. Kaloxylos, N. Alonistioti, "Towards spectrum sharing: opportunities and technical enablers". Communications Magazine, IEEE, vol. 53, no. 7, pp. 26-33, July 2015
- N. Alonistioti, E. Patouni, V. Gazis: "Generic architecture and mechanisms for protocol reconfiguration", "Mobile Networks and Applications" Journal, Special Issue on Reconfigurable Radio Technologies in Support of Ubiquitous Seamless Computing, Vol. 11, No. 6., 2006)
- V. Gazis, N. Alonistioti, L. Merakos, "Towards a Generic "Always Best Connected" Capability in Integrated WLAN/UMTS Cellular Mobile Networks (and Beyond)", IEEE Wireless Communications Magazine, Special issue on "Towards Seamless Internetworking of Wireless LAN and Cellular Networks", Vol. 12, No. 3
- E. Patouni, N. Alonistioti, L. Merakos, "Modelling and Performance Evaluation of Reconfiguration Decision-Making in Heterogeneous Radio Network Environments", Transactions on Vehicular Technology, Special issue "Achievements and the Road Ahead: The First Decade of Cognitive Radio", Issue 99, 2010
- E. Patouni, S. Gault, M. Muck, N. Alonistioti and K. Kominaki "Advanced Reconfiguration Framework based on Game Theoretical Techniques in Autonomic Communication Systems", Annals of Telecomm. Journal, Vol. 62, No 9/10, Sept./Oct. 2007
- Z. Boufidis, N. Alonistioti, and L. Merakos, "Architecture and Signaling Protocol for Migration to Cognitive Reconfigurable Post-3G Mobile Systems", ACM SIGMOBILE Mobile Comp. & Comm. Review, 2008

List of patents

- WO2017137089A1, World Intellectual Property Organization, EP 2016/052963, European Patent Office, "User Equipment Profiling for Network Administration", A. Kaloxylos, P.Spapis, C. Zhou, S. Barmpounakis, N. Alonisitioti
- WO2017211415A1, World Intellectual Property Organization, EP 2016/063081, European Patent Office, "Context Information Processor, Profile Distribution Unit and Method for a Communication Network", A. Kaloxylos, P.Spapis, C. Zhou, S. Barmpounakis, N. Alonisitioti
- WO2016184492A1, World Intellectual Property Organization, "A mobile wireless communication device and method", A. Kaloxylos, O. Bulakci, K. Chatzikokolakis, P.Spapis, N. Alonisitioti
- WO2017186308A1, World Intellectual Property Organization, EP2016/059659, European Patent Office, "Grouping manager and user equipments for a communication network", P.Spapis, A. Kaloxylos, C. Zhou, K. Chatzikokolakis, N. Alonisitioti

Other Activities:

- Project and/or technical coordinator in 8 EU RD projects.
- Participation in more than 15 R&D projects
- Total funding for the SCAN activities in NKUA through R&D projects: ~ 2,5 M€
- More than 30 program committees