

Merkourios Karaliopoulos

Senior Researcher
Department of Informatics
Athens University of Economics and Business
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Adjunct Academic Staff
School of Science and Technology
Hellenic Open University
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EDUCATION

- PhD in Electronic Engineering, University of Surrey**, United Kingdom 2004
Dissertation title: "Support of elastic TCP traffic over broadband satellite networks"
Advisor: Prof. B. G. Evans
- Diploma of Electrical and Computer Engineering, Aristotle Univ. of Thessaloniki**, Greece 1998
GPA: 9.11/10 (5-year, ranked top in '93 class)
Dissertation title: "Study of the satellite land-mobile propagation channel for 3G mobile communications"

RESEARCH INTERESTS

Performance analysis and resource allocation in the broader areas of (wireless) networking and mobile computing. Current focus areas:

- Shared wireless network infrastructures and economic sustainability
- Wireless caching and content recommendation systems in advanced mobile communication systems
- Participatory sensing/crowdsensing: incentive provision, sensor/task selection
- Mobile and online collaborative economy platforms

POSITIONS HELD

- Senior Researcher**, Athens University of Economics and Business Jan '16–present
Advisor: Assoc. Prof. I. Koutsopoulos
- Adjunct Faculty**, Hellenic Open University, Greece Oct '17–present
- Adjunct Faculty**, International Hellenic University, Thessaloniki, Greece Oct' 14–Sep '17
- Adjunct Faculty (Tutor)**, Open University of Cyprus, Nicosia, Cyprus Feb 14–Jun' 14
- Researcher**, Center for Research and Technology Hellas, Information Tech. Institute Oct '13–Dec '15
& **Visiting Researcher**, Mobile multimedia Lab, Athens University of Economics and Business
- Senior Researcher/Lecturer**, Dept. of Informatics & Telecommunications (DI&T), Univ. of Athens Sep '12–Jul '13
Advisor: Prof. I. Stavrakakis
- Senior Researcher - Marie Curie Fellow**, DI&T, Univ. of Athens Sep '10–Aug '12
Advisor: Prof. I. Stavrakakis
- Senior Researcher/ Lecturer**, Dept. of Inf. Tech. & Elec. Eng., ETH Zurich, Switzerland Apr '07–Aug '10
(part-time after Oct '09)
Advisor: Prof. B. Plattner, plattner@tik.ee.ethz.ch
- Postdoctoral Researcher**, Dept. of Comp. Sci., Univ. North Carolina at Chapel Hill, USA Nov '05–Oct '06
Advisor: Assoc. Prof. Maria Papadopouli, mgp@ics.forth.gr

R&D Engineer, New Technologies & Applications Group, Teletel S.A., Athens, Greece Feb '05–Nov '05
Group manager: V. Kollias, V.Kollias@teletel.eu

Research Associate, Centre for Comm. Sys. Research, Univ. of Surrey, UK Mar '02–Dec '04
Advisor: Prof. B. Evans, b.evans@surrey.ac.uk

RESEARCH PROJECT EXPERIENCE

CRESCENDO (Crowdsourced networks, services, transport: analytical foundations of sustainable sharing)
Athens University of Economics and Business Oct '18–present
National project-grant by the Hellenic Foundation for Research and Innovation (PI)

VELOS (Optimal content caching techniques for advanced mobile commun. networks) May '18–Aug. '19
Athens University of Economics and Business
National project-grant by the EU European Structural and Investment Funds-Partnership Agreement 2014-20

netCommons (Network infrastructures as commons) Jan '16–Dec' 18
Athens University of Economics and Business
funded by the European Union Research Framework Program H2020 (ICT Collective Awareness Platforms)

RECITAL (Resource Management for Self-coordinated Autonomic Wireless Networks) Sep '12–Sep '15
CERTH-ITI
European Research Council (ERC) competition runner-up award (co-funded by Greece and the European Union) – award holder: Associate Professor I. Koutsopoulos

EINS (Network of Excellence in Internet Science) Sep '12–Aug '13
University of Athens
funded by the European Union Research Framework Program 7

Retune (Resilience of opportunistic networks to node misbehaviors) Sep '10–Aug '12
Marie Curie Intra European Fellowship (IEF) grant – Host: University of Athens
funded by the European Union Research Framework Program 7

Recognition (Relevance and cognition for self-awareness in a content-centric Internet) Sep '13–Jan '13
University of Athens
funded by the European Union Research Framework Program 7 (FET Open)

SocialNets (Social Networking for Pervasive Adaptation) Oct '09–Aug '10
University of Athens
funded by the European Union Research Framework Program 7 (FET Open)

ResumeNet (Resilience and Survivability for future networking: framework, mechanisms, and experimental evaluation), ETH Zurich Sep '08–Dec '11
funded by the European Union Research Framework Program 7

System engineering of large-scale wireless local area networks on the basis of real measurement data,
University of North Carolina at Chapel Hill Nov '05–Oct '06
funded by an IBM grant, Advisor: Assistant Professor Maria Papadopouli

MAGIC (Management of Galileo Interference and Countermeasures) Jul '05–Nov '05
Teletel S.A.
funded by Galileo Joint Undertaking (EU and European Space Agency)

MAESTRO (Mobile Apps & Services based on Satellite & Terrestrial Interworking) University of Surrey funded by the European Union Research Framework Program 6	Jan '04–Dec '04
MoDiS (Mobile Digital Broadcasting Satellite) University of Surrey funded by the European Union Research Framework Program 5	Apr '02–Sep '04
SATIN (Satellite-UMTS IP-based Network) University of Surrey funded by the European Union Research Framework Program 5	Mar '02–Mar '03

TEACHING ACTIVITIES

Adjunct Lecturer Hellenic Open University Course: Fundamental issues of computer networks Undergraduate program of studies in Informatics	Oct '17–present
Adjunct Lecturer International Hellenic University Courses (MSc program in ICT Systems, School of Science & Technology): Computer Networks (Fall Semester) Wireless communications and networking (Spring semester)	Oct '14–present
Adjunct Lecturer Open University of Cyprus Course: <i>Mobile and Pervasive Computing</i> (MSc program: Information and Communication Systems)	Feb '14–June '14
Visiting Lecturer and course co-instructor Department of Informatics and Telecommunications, University of Athens - Co-lecturing and coordination for the Master course entitled <i>Advanced Networking Technologies</i>	Spring '10, '11, '12, '13
Lecturer & course co-instructor Department of Information Technology and Electrical Engineering, ETH Zurich - Co-lecturing and coordination for the Master course entitled <i>Advanced Topics in Communication Networks</i>	Fall '08
Visiting Lecturer Department of Information Technology and Electrical Engineering, ETH Zurich - Co-lecturing for the Master course entitled <i>Advanced Topics in Communication Networks</i>	Fall '07
Student (Co)-supervision School of Science and Technology, International Hellenic University - Co-supervision of Master-level students <i>Master-level students</i> <ul style="list-style-type: none">○ K. Vezirtzoglou. Dissertation recommender system: design and development. May '17-Dec '17○ A. AlSabbagh. Wireless caching for 5G cellular networks. May '17-Dec '17○ C. Moz Preza. Learning user preferences from experimental data. Jun '16-Nov '16○ D. Markopoulos. On the critical mass for smart city crowd-sensing applications. Jul '15-Dec '15○ V. Charissi. Towards maritime opportunistic networks. Jul '15-Dec '15	Feb '14 – present

Department of Informatics, Athens University of Economics and Business Feb '14– present
- Co-supervision of PhD and Master-level students

Master-level students

- K. Kontoulis. Cognitive decision-making heuristics: applications to crowdsensing. Oct '18-May '19

PhD students

- L.E. Chatziargyriou. Joint optimization of caching and recommendation systems. Feb'16 – May '18

Department of Informatics and Telecommunications, University of Athens Oct '09–Jul '13
- Co-supervision of PhD and Master-level students

PhD students

- E. Kokolaki. Information dissemination and consumption in competitive networking urban environments. Jul '10-July '13
- P. Pantazopoulos. Content placement problems. Feb '10-July '13
- E. Jaho. Cooperative mechanisms for information dissemination and retrieval in networks with autonomous nodes. Feb '10-Dec '11

Master-level students

- E. Kokolaki. Approaches to the parking place search process. Feb '10-May '10
- P. Nikolopoulos and T. Papadimitriou. On centrality-based routing for opportunistic networks. Sep '10-Mar '11
- G. Kollias and M. Papadaki. Vehicle networks: vulnerability of parking search space applications to selfish/malicious behaviors. Oct '11-Nov '12
- K. Ztoupis, T. Sykas. Lab exercises on opportunistic networking. Oct '11-Apr '12
- G. Nomikos. On node centrality metrics and their relevance to data networking. Oct '12 –Aug '13

Department of Information Technology and Electrical Engineering, ETH Zurich Apr '07–Sep '09
- Co-supervision of PhD and Master-level students

PhD students

- G. Parissidis. Interference-Aware Routing in Wireless Multihop Networks. Apr '07–Apr '08 (graduation)
- S. Heimlicher. Hop-by-hop transport protocol for Wireless Multihop Networks. Apr '07–Dec '08
- G. Popa. Resilience to node misbehavior in Wireless Mesh Networks. Sep '08–Jun '09

Master-level students

- M. Fischer. Distributed challenge detection for network resilience. May '10 (jointly with Dr. Paul Smith, Computer Science Dept., Lancaster University, UK)
- M. von Känel. Monitoring and management tools for the TiKNet Wireless Multihop Testbed. Mar '09
- G. Sotiropoulos. Experimentation and evaluation of routing metrics for multi-hop ad-hoc wireless networks on an indoor wireless testbed. Sep '07

Department of Electronic Engineering, University of Surrey Jan '03–Sep '04
- Supervision of Master-level students

- H. Du. The TCP memory feature. Jan '04-Sep '04
- U. A. Sadiq. Multidestination Automatic Repeat reQuest (ARQ) protocols. Jan '04-Sep '04
- N. Raftopoulos. Evaluation of analytical methods for dimensioning wireless/satellite networks for TCP traffic. Mar '03-Sep '03

Tutorials

- “Wireless Community networks and 5G: the 7-Billion-user challenge,” half-day tutorial, presented in EuCNC 2018, Ljubljana, Slovenia, June 2018 (with R. Lo Cigno, L. Maccari, L. Navarro, I. Koutsopoulos)
- “Wireless resource and infrastructure sharing challenges in future wireless architectures”, half-day tutorial, IEEE CAMAD 2018, Barcelona, September 2018 (with I. Koutsopoulos)

Lab demonstrator

Department of Electronic Engineering, University of Surrey 2000 – 2001
- Lab demonstrator for undergraduate/graduate courses: *RF engineering, Antennas & Propagation*

Other teaching activities

Department of Information Technology and Electrical Engineering, ETH Zurich Apr '07–Aug '09
- Wireless Multihop Network testbed: Maintenance, upgrades (hardware and software) and implementation of lab exercises on the Wireless Multihop Testbed (TiKNet) of the group. Supervision of two Semester theses on the testbed (Michi von Känel, Georgios Sotiropoulos).
<http://tiknet.ee.ethz.ch>

Graduate Student Committee Participation

Ph.D. examination committee member for Leonidas Tzevelekas, Univ. of Athens, May 2010, Athens, Greece

Ph.D. examination committee member for Dimitris Kogias, Univ. of Athens, May 2010, Athens, Greece

AWARDS-GRANTS

Hellenic Foundation for Research and Innovation grant for postdoctoral researchers

For carrying out research on collaborative platforms and sharing economy applications Oct 2018-Sep 2021

Marie Curie IEF Grant: Retune - Resilience of Opportunistic Networks to Node Misbehaviors

For carrying out research on the impact of malicious and selfish node behaviors on the performance of delay tolerant networks Sep 2010-Aug 2012

Hellenic State Scholarships Foundation (IKY) grant for postgraduate studies

For postgraduate studies abroad in the area of Electronic Engineering (3.5-year duration) 1999-2002

Hellenic State Scholarships Foundation (IKY) award

For top graduation rank of '93 class 1998

Hellenic State Scholarships Foundation (IKY) awards

Academic excellence awards through all five years of undergraduate studies 1994-1998

Technical Chamber of Greece (TEE) awards

Academic excellence awards through last three years of undergraduate studies 1995-1998

Hellenic State Scholarship Foundation (IKY) award

Ranked top in the national entry exams to the Department of Electrical and Computer Engineering of Aristotle University of Thessaloniki, Greece 1993

Hellenic Scientific Society award

First place in the Physics contest among students from the Prefecture of Thessaloniki, Greece Mar 1993

INVITED TALKS

- *Resource Management for IP-based Broadband IP-based Satellite Systems*. ETSI BSM (Broadband Satellite Multimedia) Working Group meeting, Vienna, Austria, 17 January 2001
- *Simulating GEO broadband satellite networks with network simulator (ns2)*. COST 272 meeting, Guildford, University of Surrey, Dec 2003
- *Reliable content delivery in wireless networks*. ETH Zurich, 12 December 2006
- *Fixed-point approximations for performance analysis of wireless networks*. ICS FORTH, Heraklion, Crete, Greece, 13 Feb 2009 (host: Ass. Prof. M. Papadopouli)
- *Fixed-point approximations for performance analysis of wireless networks*. NCSR Demokritos, Athens, Greece, 16 Feb 2009 (host: Dr. S. Thomopoulos)
- *Fixed-point approximations for performance analysis of satellite networks*. University of Aegean, Karlovasi, Samos, 26 Mar 2009
- *Analytical modeling tools for assessing network resilience*, ETH Zurich, Network Resilience PhD course, Zurich, Switzerland, 28 Sep 2011
- *Vehicular networks and sensor technology for smart parking assistance solutions*, University of Sussex, Brighton, UK, 3 Oct 2013
- *User Profiling and Incentive Provision for Mobile Crowdsensing*, University of Warwick, Coventry, UK, 25 Jul 2016
- *User Profiling and Incentive Provision for Mobile Crowdsensing*, University of Ioannina, Ioannina, Greece, 7 Oct 2016 (host: Assist. Prof. E. Papapetrou)
- *Network science and opportunistic networking*, Uppsala University, Network Science PhD course, Uppsala, Sweden, 1 Dec 2016 (hosts: Assist. Prof. Matteo Magnani, Dr. Christian Rohner)

PROFESSIONAL AFFILIATIONS AND SERVICE

Member of IEEE, ACM, Technical Chamber of Greece

Regular Journal Reviewer (≥ 3 reviews per year) for:

- IEEE Transactions on Mobile Computing, IEEE/ACM Transactions on Networking
- Elsevier: Computer Communications

Occasional Journal Reviewer for:

- IEEE: Journal of Selected Areas in Communications, Transactions in Wireless Communications
- ACM Transactions of Internet Technology
- Elsevier: Computer Networks, Ad Hoc Networks, Transportation Research Part A, Pervasive Mobile Computing

Workshop Organization

- Organization Committee for 1st Int'l Workshop on Network Resilience (in conjunction with IEEE SRDS 2011), Madrid, Spain, Oct 4, 2011
- TPC Co-Chair for AOC 2012, 6th IEEE WoWMoM Workshop on Autonomic and Opportunistic Communications, San Francisco, CA, USA, Jun 25 2012
- TPC Co-Chair for AOC 2013, 7th IEEE WoWMoM Workshop on Autonomic and Opportunistic Communications, Madrid, Spain, Jun 4 2013

Technical Program Committee member for:

- IEEE Global Telecommunications Conf. (GLOBECOM) 2010-2020
- IEEE Int'l Conf. of Telecommunications (ICC) 2009-2020
- IEEE DRCN 2016, 2017
- IEEE/IFIP WONS 2016

- IEEE INFOCOM '14 DySoN workshop, 2014
- ACM MSWiM 2012-2014, 2020
- ACM CHANTS 2011 (session chair), 2013
- 5th IEEE WoWMoM Autonomic and Opportunistic Communications (AOC) workshop 2011
- Int'l Workshop on Self-Organizing Systems (IWSOS) 2009
- Workshop on the Emergence of Delay-/Disruption-Tolerant Networks (E-DTN) 2009
- INFOCOM Global Internet Symposium 2009 (GI' 2009) (session chair)
- 16th IEEE LANMAN 2008
- IEEE Vehicular Technology Conference 2003, 2004
- 6th European Workshop on Mobile/Personal Satcoms/2nd Advanced Satellite Mobile Systems Conference 2004

RESEARCH GRANTS/FUNDING

Crowdsourced networks, services, transport: analytical foundations of sustainable sharing

Host Institute: Athens University of Economics and Business

Project proposal author and PI

Funded by the Hellenic Foundation for Research and Innovation, overall funding: 172 k€

Duration: 36 months, Oct '18-Aug '21

Optimal content caching techniques for advanced mobile communication networks

Athens University of Economics and Business

Project proposal author

Funded by European Structural and Investment Funds, overall funding: 52 k€

Duration: 15 months, May '18-Aug '19

COHESION (*Cognitive Heuristics for distributed resource allocation/selection*)

University of Athens, FP7 NoE EINS Open Call action

Project proposal main author

Funded by EC research framework program 7, overall funding: 34.3k€

Duration: 1 year, Oct '13-Sep '14

FOCAL (*Foundations for Collective awareness platforms*)

University of Athens, FP7 NoE EINS Open Call action

Project proposal main author

Funded by EC research framework program 7, overall funding: 46k€

Duration: 1 year, Oct '13-Sep '14

Marie Curie IEF Grant (Retune - Resilience of Opportunistic Networks to Node Misbehaviors)

Host institute: University of Athens, Greece

Funded by EC research framework program 7, overall funding: 188k€

Duration: 2 years, Sep '10-Aug '12

ResumeNet (*Resilience and Survivability for future networking: framework, mechanisms, and experimental evaluation*)

ETH Zurich

Project proposal main author and approved project technical coordinator

Funded by EC research framework program 7 (FP7 Call 2), overall funding from EC: 3.048M€

Duration: 3 years (Sep '08 – Aug '11)

STARRS (*Sensor for terrestrial and Airborne Radio-transmitter rescue search*)

Teletel S.A.

Project proposal 2nd author (coordinator: Thales Communications, France)

Funded by EC research framework program 6, overall funding from EC: 2.43M€

Duration: 2 years (Oct '06 – Sep '08)

LANGUAGES

English	Excellent
German	Very Good (4 years, Zentrale Mittelstufenprüfung)
Italian	Elementary (2 years)
Greek	Native speaker

PUBLICATIONS (in reverse chronological order)

citations: 1801, **h-index:** 23, **i10-index:** 48

Source: Google scholar (as of 02.08.2020)

Dissertations

M. Karaliopoulos. *Support of elastic TCP traffic over broadband geostationary satellite networks*. Thesis for the award of Doctor of Philosophy (PhD) degree, University of Surrey, United Kingdom, April 2004

M. Karaliopoulos. *Third generation satellite communication systems: Study of the radio propagation channel for mobile communications*. Diploma Thesis. Department of Electrical and Computer Engineering, Aristotle University of Thessaloniki, Greece, September 1998

Book chapters

G.Parissidis, M. Karaliopoulos, R. Baumann, T. Spyropoulos, B. Plattner, "Routing Metrics for Wireless Mesh Networks", Springer's Handbook on Wireless Mesh Networks, Fall 2008

LE. Chatzieftheriou, M. Karaliopoulos, I. Koutsopoulos, "On the Joint Optimization of Content Caching and Recommendations," invited chapter to book "Edge Caching for Wireless Networks", The Institution of Engineering and Technology (IET), Editor: H. Vincent Poor

Journal articles

1. M. Karaliopoulos, E. Bakali, Optimizing mobile crowdsensing platforms for boundedly rational users, to appear in IEEE Transactions on Mobile Computing, 2020
2. Y. Thomas, M Karaliopoulos, G Xylomenos, GC Polyzos, Low Latency Friendliness for Multipath TCP, IEEE/ACM Transactions on Networking, vol. 28, no.1, pp. 248-261, Jan. 2020
3. L. Maccari, G. Gemmi, RL. Cigno, M. Karaliopoulos, L. Navarro, Towards scalable Community Networks topologies, *Elsevier Ad Hoc Networks*, vol. 94, Nov. 2019
4. LE. Chatzieftheriou, G Darzanos, M Karaliopoulos, I Koutsopoulos, Joint User Association, Content Caching and Recommendations in Wireless Edge Networks, *ACM SIGMETRICS Performance Evaluation Review*, vol. 46, no. 3, pp. 12-17, Jan. 2019
5. LE. Chatzieftheriou, M. Karaliopoulos, I. Koutsopoulos, Jointly optimizing content caching and recommendations in small cell networks, *IEEE Transactions on Mobile Computing*, vol 18, no. 1, pp. 125-138, Apr. 2018
6. P. Micholia, M. Karaliopoulos, I. Koutsopoulos, L. Navarro, R. Baig, D. Boucas, M. Michalis, P. Antoniadis, Community Networks and Sustainability: a Survey of Perceptions, Practices, and Proposed Solutions, *IEEE Communications Surveys and Tutorials*, vol. 20, no. 4, pp. 3581-3606, March 2018
7. M. Karaliopoulos, K. Katsikopoulos, L. Lambrinos, Bounded rationality can make parking search more efficient: The power of lexicographic heuristics, *Transportation Research Part B: Methodological*, vol. 101, pp. 28-50, July 2017
8. P. Micholia, M. Karaliopoulos, I. Koutsopoulos, L.M. Aiello, G. De Francisi Morales, D. Quercia, Incentivizing social media users for mobile crowdsourcing, *International Journal of Human-Computer Studies*, vol. 102, issue C, pp. 4-13, April 2017

9. M. Karaliopoulos, Engage others or leave it to the source? On optimal message replication in DTNs under imperfect cooperation, *IEEE Transactions on Mobile Computing*, vol. 16, no. 3, pp. 730-743, March 2017
10. E. Kokolaki, M. Karaliopoulos, G. Kollias, M. Papadaki, I. Stavrakakis, Vulnerability of opportunistic parking assistance systems to vehicular node selfishness, *Elsevier Computer Communications*, vol. 48, pp. 159-170, July 2014
11. F. Bjurefors, M. Karaliopoulos, C. Rohner, P. Smith, G. Theodoropoulos and P. Gunningberg, Resilience and Opportunistic Forwarding: Beyond Average Value Analysis, *Elsevier Computer Communications*, vol. 48, pp. 111-120, July 2014
12. S.M. Allen, M.J. Chorley, G.B. Colombo, E. Jaho, M. Karaliopoulos, I. Stavrakakis, R.M. Whitaker, Exploiting user interest similarity and social links for micro-blog forwarding in mobile opportunistic networks, *Elsevier Pervasive and Mobile Computing*, vol. 11, pp. 106-131, April 2014,
13. P. Pantazopoulos, M. Karaliopoulos, I. Stavrakakis, Distributed placement of autonomic Internet services, *IEEE Transactions on Distributed and Parallel Systems*, vol. 25, no. 7, pp. 1702-1712, July 2014
14. E. Kokolaki, M. Karaliopoulos, I. Stavrakakis, Leveraging information in vehicular parking games *IEEE Transactions on Vehicular Technology*, vol. 62, no. 9, pp. 4309-4317, November 2013
15. E. Jaho, M. Karaliopoulos, and I. Stavrakakis, Social Similarity favors cooperation: the content placement case, *IEEE Transactions On Parallel and Distributed Systems*, vol. 21, no. 3, March 2013
16. E. Kokolaki, M. Karaliopoulos, I. Stavrakakis, Opportunistically assisted parking service discovery: now it helps, now it does not, *Elsevier Pervasive and Mobile Computing*, vol. 8, no. 2, pp. 210-227, April 2012
17. W. Deng, M. Karaliopoulos, W. Muhlbauer, P. Zhu, X. Lu, B. Plattner, k-Fault Tolerance of the Internet AS graph, *Computer Networks (COMNET)*, vol. 55, no. 10, pp. 2492-2501, July 2011
18. P. Smith, D. Hutchison, J.P.G. Sterbenz, M. Schöller, A. Fessi, M. Karaliopoulos, C. Lac, and B. Plattner, Network Resilience: A Systematic Approach, *IEEE Communications Magazine*, vol. 49, no. 7, pp. 88-97, July 2011
19. G. Parissidis, M. Karaliopoulos, T. Spyropoulos, B. Plattner, Interference-aware Routing in Wireless Multihop Networks, *IEEE Transactions on Mobile Computing*, vol. 10, no. 5, pp. 716-733, May 2011
20. M. Karaliopoulos, Assessing the vulnerability of DTN forwarding schemes to node selfishness, *IEEE Communication Letters*, vol. 13, no. 12, pp. 923-925, December 2009
21. W. Chai, M. Karaliopoulos, and G. Pavlou, Providing Proportional TCP Performance by Fixed-point Approximations over Bandwidth on Demand Geostationary Satellite Networks, *IEEE Transactions in Wireless Communications*, July 2009
22. M. Chipeta, M. Karaliopoulos, L. Fan and B. Evans, Integrating Packet-Level FEC with Data Carousels for Reliable Content Delivery in Satellite Broadcast/Multicast Systems, *International Journal of Satellite Communications and Networking*, Jan-Feb 2007 (invited)
23. I. Andrikopoulos, M. Karaliopoulos *et al.*, Demonstration with field trials of satellite-terrestrial synergistic approach for digital multimedia broadcasting to mobile users, *IEEE Wireless Communications Magazine*, October 2005
24. M. Karaliopoulos, K. Narenthiran, P. Henrio, I. Andrikopoulos and B. Evans, Packet scheduling for the delivery of multicast/broadcast services via S-UMTS, *International Journal of Satellite Communications and Networking*, September-October 2004

25. M. Karaliopoulos *et al.*, Satellite radio interface and radio resource management strategy for the delivery of multicast/broadcast services via an integrated satellite-terrestrial system, *IEEE Communications Magazine*, September 2004
26. M. Karaliopoulos, R. Tafazolli, B. Evans, Providing differentiated service to TCP flows over Bandwidth on demand GEO satellite networks, *IEEE Journal of Selected Areas in Communications*, special issue on IP over broadband satellite networks, February 2004
27. K. Narenthiran, M. Karaliopoulos et al (SATIN Consortium), S-UMTS access network for broadcast and multicast service delivery: the SATIN approach, *International Journal of Satellite Communications and Networking*, January-February 2004
28. M. Karaliopoulos, F.-N. Pavlidou, Modeling the Land Mobile Satellite Channel: a review, *IEE Electronics and Communication Engineering Journal*, vol. 10, no. 5, October 1999

Peer-reviewed conference proceedings

1. M. Karaliopoulos, I. Koutsopoulos, "Collective subscriptions: a novel funding tool for crowdsourced network infrastructures," to appear in IEEE WoWMoM 2020, Cork, Ireland, Sep. 2020
2. M. Karaliopoulos, L. Chatzieftheriou, G. Darzanos, I. Koutsopoulos, "On the Joint Content Caching and User Association Problem in Small Cell Networks," IEEE ICC 2020 ULMC6GN workshop, Dublin, Ireland, June 2020
3. G. Darzanos, L. Chatzieftheriou, M. Karaliopoulos, I. Koutsopoulos, "Content Preference-aware User Association and Caching in Cellular Networks," WiOpt 2020 CCWDN workshop, Volos, Greece, June 2020
4. M Karaliopoulos, I Koutsopoulos, Infrastructure and service provider games in crowdsourced networks, poster paper in ACM MOBIHOC '19, Catania, Italy, July 2020
5. M Karaliopoulos, I Koutsopoulos, L Spiliopoulos, "Optimal User Choice Engineering in Mobile Crowdsensing with Bounded Rational Users," in Proc. IEEE INFOCOM 2019, pp. 1054-1062, Apr-May 2019, Paris, France
6. M. Karaliopoulos, I. Koutsopoulos, "Mobile App User Choice Engineering Using Behavioral Science Models," in Proc. IEEE 19th International Workshop on Signal Processing Advances in Wireless Communications (SPAWC), June 2018, Kalamata, Greece
7. L. Maccari, M. Karaliopoulos, I. Koutsopoulos, L. Navarro, F. Freitag, and R. Lo Cigno, "5G and the Internet of EveryOne: Motivation, Enablers, and Research Agenda," in Proc. EUCNC 2018, Ljubljana, Slovenia, 2018
8. L.E. Chatzieftheriou, M. Karaliopoulos, I. Koutsopoulos, "Caching-aware recommendations: Nudging user preferences towards better caching performance," in Proc. IEEE INFOCOM '17, April 2017, Atlanta, GA, USA
9. M. Karaliopoulos, M. Titsias, I. Koutsopoulos, "First learn then earn: optimizing Mobile Crowdsensing Campaigns through Data-driven User Profiling," in Proc. ACM MOBIHOC '16, July 2016, Paderborn, Germany
10. P. Micholia, M. Karaliopoulos, I. Koutsopoulos, Mobile Crowdsensing Incentives under Participation Uncertainty, in Proc. ACM Mobihoc MSCC workshop, July 2016, Paderborn, Germany
11. M. Karaliopoulos, L. Spiliopoulos and I. Koutsopoulos, "Factoring the human decision-making limitations in mobile crowdsensing," in Proc. IEEE/IFIP WONS 2016, Italy, January 2016

12. M. Karaliopoulos, O. Telelis, I. Koutsopoulos, "User Recruitment for Mobile Crowdsensing over Opportunistic Networks," in Proc. IEEE INFOCOM '15, April-May 2015, Hong-Kong
13. G. Nomikos, P. Pantazopoulos, M. Karaliopoulos, I. Stavrakakis, "The Multiple Instances of Node Centrality and their Implications on the Vulnerability of ISP networks," in Proc. 26th International Teletraffic Congress (ITC 26), Karlskrona, Sweden, September 2014
14. M. Karaliopoulos, K. Katsikopoulos, L. Lambrinos, "Bounded Rationality can Increase Parking Search Efficiency", in Proc. ACM MOBIHOC'14, Philadelphia, PA, USA, August 2014
15. E. Kokolaki, M. Karaliopoulos, I. Stavrakakis, "Trading public parking space," in Proc. 1st Int'l Workshop on Smart Vehicles: Connectivity Technologies and ITS Applications 2014 (co-located with WoWMoM), Sydney, Australia, June 2014
16. E. Kokolaki, M. Karaliopoulos, I. Stavrakakis "Parking assisting applications: effectiveness and side-issues in managing public goods," in Proc. 3rd SASO Awareness workshop, Philadelphia, USA, Sept. 2013
17. F. Bjurefors, M. Karaliopoulos, C. Rohner, P. Smith, G. Theodoropoulos and P. Gunningberg, "Resilience and Opportunistic Forwarding: Beyond Average Value Analysis," in Proc. ACM CHANTS '13, Toronto, Canada, September 2013
18. P. Pantazopoulos, M. Karaliopoulos, I. Stavrakakis, "On the Local Approximations of Node Centrality in Internet Router-level Topologies," 7th IFIP Int'l Workshop on Self-Organizing Systems (IWSOS), Palma de Mallorca, Spain, May 2013
19. E. Kokolaki, M. Karaliopoulos, I. Stavrakakis, "On the efficiency of information-assisted search for parking space: a game-theoretic approach," 7th IFIP Int'l Workshop on Self-Organizing Systems (IWSOS), Palma de Mallorca, Spain, May 2013
20. E. Kokolaki, M. Karaliopoulos, I. Stavrakakis, "On the human-driven decision-making process in competitive environments," 1st Internet Science Conference, Brussels, Belgium, April 2013 (Best student paper award – Special mention)
21. 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 International Conference on Wireless On-demand Network Systems and Services (IFIP/IEEE WONS), Banff, Canada, January 2013
22. M. Karaliopoulos, C. Rohner, "Trace-based performance analysis of opportunistic forwarding under imperfect cooperation conditions", INFOCOM 2012 Mini-Conference, March 2012, Orlando, FL, USA
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Technical Reports

Towards a Framework for Computing Topological Network Robustness

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