

39 Peer-reviewed publications:

- 10 journals (1 magazine)
- 29 in conference proceedings (18 main track, 11 workshops, 1 demo)

7 technical reports

Journal Publications (j: journals, m: magazines)

- [j1] Y. Bi, et al., "Multi-Objective Deep Reinforcement Learning Assisted Service Function Chains Placement", IEEE Transactions on Network and Service Management, Vol 18, Issue: 4, pp. 4134-4150, ISSN: 1932-4537, DOI: 10.1109/TNSM.2021..3127685, 2022.
- [j2] S. Moazzeni, P. Jaisudthi, A. Bravalheri, N. Uniyal, X. Vasilakos and R. Nejabati, D. Simeonidou, "A Novel Autonomous Profiling Method for the Next Generation NFV Orchestrators," IEEE Transactions on Network and Service Management, vol. 18, no. 1, pp. 642-655, doi: 10.1109/TNSM.2020..3044707, Mar. 2021.
- [j3] M. Bunyakitanon, A. P. Silva, X. Vasilakos, R. Nejabati, D. Simeonidou, "Auto-3P: An autonomous VNF performance prediction & placement framework based on machine learning", Computer Networks, Volume 181, 107433, ISSN 1389-1286, doi: 10.1016/j.comnet.2020..107433, 2020.
- [j4] M. Bunyakitanon, X. Vasilakos, R. Nejabati, D. Simeonidou, "End-to-End Performance-based Autonomous VNF Placement with adopted Reinforcement Learning," IEEE Transactions on Cognitive Communications and Networking, Special issue on Intelligent Resource Management for 5G and Beyond, 6(2), pp. 534-547, 2020.
- [j5] A. Mavromatis, C. Colman-Meixner, A. P. Silva, X. Vasilakos, R. Nejabati, D. Simeonidou, "A Software-Defined IoT Device Management Framework for Edge and Cloud Computing", IEEE Internet of Things Journal, pp. 1718-1735, DOI:10.1109/JIOT.2019..2949629, March, 2020.
- [j6] Q. Wang et al., "Enable Advanced QoS-Aware Network Slicing in 5G Networks for Slice-Based Media Use Cases", in IEEE Transactions on Broadcasting, Vol. 65(2), pp. 444-453, DOI: 10.1109/TBC.2019..2901402, March, 2019.
- [j7] X. Vasilakos, V. A. Siris, G.C. Polyzos, "Addressing niche demand based on joint mobility prediction and content popularity caching", Computer Networks, vol. 110, pp. 306-323, DOI:10.1016/j.comnet.2016..10.001, 2016.
- [j8] G. Xylomenos, C. Ververidis, V. A. Siris, N. Fotiou, C. Tsilopoulos, X. Vasilakos, K. Katsaros, G. C. Polyzos, "A Survey of Information-Centric Networking Research", IEEE Communications Surveys & Tutorials, vol. 16(2), pp. 1024-1049, DOI:10.1109/SURV.2013..070813.00063, 2014.
- [m9] G. Xylomenos, X. Vasilakos, C. Tsilopoulos, V. A. Siris, G. C. Polyzos, "Caching and Mobility Support in a Publish-Subscribe Internet Architecture", IEEE Communications Magazine, vol. 50, DOI:10.1109/MCOM.2012..6231279, July, 2012.
- [j10] G. Lucarelli, X. Vasilakos, I. Androutsopoulos, "Named Entity Recognition in Greek Texts with an Ensemble of SVMs and Active Learning", International Journal on Artificial Intelligence Tools, pp 1015-1045, Vol. 16(6), DOI:10.1142/S0218213007003680, 2007.

In Proceedings (p: main track; w: workshop; d: demo)

- [p1] P. Jaisudthi, S. Moazzeni, X. Vasilakos, R. Nejabati, and D. Simeonidou, "i-Profiler: Towards Multi-Objective Autonomous VNF
- [p2] J. M. P. Ullauri, L. F. Gonzalez, A. C. Bravalheri, R. Hussain, X. Vasilakos, I. Vidal, F. Valera, R. Nejabati, and D. Simeonidou,
- [p3] X. Vasilakos, S. Olowu, R. Nejabati and D. Simeonidou, "Towards an intelligent 6G architecture: the case of jointly Optimised handover and Orchestration", 47th World Wireless Forum meeting (WWRF47), Bristol, United Kingdom, 21-23 June, 2022.
- [p4] N. Uniyal, J. Parra-Ullauri, S. Olowu, A. Bravalheri, X. Vasilakos, R. Nejabati and D. Simeonidou, "On the design of a native Zero-
- [p5] M. Bunyakitanon, Xenofon Vasilakos, R. Nejabati and D. Simeonidou, "HELICON: Orchestrating low-latent & load-balanced Virtual Network Functions", IEEE ICC'22, Seoul, Korea, 12-20 May, 2022.
- [p6] N. Uniyal, A. Bravalheri et. al, "Intelligent Mobile Handover Prediction for Zero Downtime Edge Application Mobility", IEEE Globecom, 2021. Global Communications Conference: Selected Areas in Communications: Machine Learning for Communications (Globecom2021. SAC MLC), Madrid, Spain, Dec., 2021.
- [p7] X. Vasilakos, M. Bunyakitanon, R. Nejabati and D. Simeonidou, "Towards Low-latent & Load-balanced VNF Placement with Hierarchical Reinforcement Learning", IEEE International Mediterranean Conference on Communications and Networking, 7-10 September, Athens, Greece, 2021.
- [p8] D. Warren, X. Vasilakos, W. Featherstone, "Edge-based 5G Network Architectures in support of Zero Downtime Mobility for Enterprise Applications", in Proceedings of Optical Fiber Transmission 2021., June 6, virtual conference, 2021.
- [p9] X. Vasilakos, W. Featherstone, N. Uniyal, et al., "Towards Zero Downtime Edge Application Mobility for Ultra-Low Latency 5G Streaming", IEEE Cloud Summit 2020., October 21-22, virtual conference, 2020.
- [w10] X. Vasilakos, B. Koksai, D. Hartati Izaldi et al., "ElasticSDK: A Monitoring Software Development Kit for enabling Data-driven Management and Control in 5G", IEEE/IFIP Network Operations and Management Symposium Miniconference, Budapest, Hungary, 20-24 April, 2020.
- [w11] A. Pagès, F. Agraz, S. Spadaro et al., "A QoE-oriented Cognition-based Management System for 5G Slices: The SliceNet Approach", EuCNC 2019. European Conference on Networks and Communications, Workshop 7- Artificial Intelligence for 5G Networks, 18 Jun 2019., 2019.
- [p12] L. Baldini, X. Vasilakos, C.-Y. Chang, N. Nikaein et al., "SliceNet Control Plane for 5G Network Slicing in Evolving Future Networks", 5th IEEE Conference on Network Softwarization, NetSoft 2019., Paris, France, June 24-28, 2019.

- [p13] N. Nikaein, X. Vasilakos, A. Huang, "LL-MEC: Enabling Low Latency Edge Applications", IEEE International Conference on Cloud Networking (CloudNet'18), Tokyo, Japan, 22-24 October, 2018.
- [p14] G. Xylomenos, A. Phinikarides, I. Doumanis, X. Vasilakos et al., "IPTV Over ICN", the ACM MMSys'18, Packet Video Workshop (PV'18), Amsterdam, the Netherlands, June, 2018.
- [d15] N. Nikaein et al., "Plug & Play Network Application Chaining for Multi-Service Programmability in 5G RAN", 16th ACM International Conference on Mobile Systems, Applications, and Services, MobiSys Demos, June 10-15, 2018.
- [p16] G. Xylomenos, Y. Thomas, X. Vasilakos, M. Georgiades et al., "IPTV Over ICN Goes Live", EuCNC 2018.: Operational & Experimental Insights (OPE), Ljubljana, Slovenia, June, 2018.
- [w17] X. Vasilakos, M. Q. Al-Khalidi, V. A. Siris, M. J. Reed, N. Thomos, G. C. Polyzos, "Mobility-based Proactive Multicast for seamless mobility support in cellular network environments", the ACM SIGCOMM 2017. International Workshop on Mobile Edge Communications (MECOMM 2017.), UCLA, California, USA, Aug. 21, 2017.
- [p18] V. A. Siris, X. Vasilakos and D. Dimopoulos "Exploiting mobility prediction for mobility & popularity caching and DASH adaptation", IEEE WoWMoM 2016. conference, Coimbra, Portugal, 2016.
- [p19] K. Katsaros, X. Vasilakos, T. Okwii, G. Xylomenos, G. Pavlou, G. C. Polyzos, "On the Inter-domain Scalability of Route-by-Name Information-Centric Network Architectures", IFIP Networking 2015., Toulouse, France, 2015.
- [w20] X. Vasilakos, V. A. Siris, "Adapting Data Popularity in Mobility-Based Proactive Caching Decisions for Heterogeneous Wireless Networks", EAI Endorsed Trans. Cloud Syst., vol. 2(7), pp. e3, DOI:10.4108/icst.qshine.2014..256316, 2016.
- [p21] V. A. Siris, X. Vasilakos, G. C. Polyzos, "Efficient Proactive Caching for Supporting Seamless Mobility", IEEE World of Wireless, Mobile and Multimedia Networks (WoWMoM), Sydney, Australia, June, 2014.
- [p22] X. Vasilakos, K. Katsaros, G. Xylomenos, "Cloud computing for global name-resolution in information-centric networks", IEEE Network Cloud Computing and Applications Symposium '12, 2012.
- [w23] X. Vasilakos, V. A. Siris, G. C. Polyzos, M. Pomonis, "Proactive Selective Neighbor Caching for Enhancing Mobility Support in Information-Centric Networks", ACM ICN'12 workshop, in conjunction with SIGCOMM, Helsinki, Finland, August, 2012.
- [p24] K. Katsaros, N. Fotiou, X. Vasilakos, C. Ververidis, C. Tsilopoulos, G. Xylomenos, G. C. Polyzos, "On Inter-domain Name Resolution for Information-Centric Networks", IFIP Networking, Prague, Czech Republic, May, 2012.
- [p25] X. Vasilakos, V. A. Siris, G. C. Polyzos, "Towards Exploiting User-Centric Information for Proactive Caching in Mobile Networks", 28th World Wireless Research Forum (WWRF28), Athens, Greece, April, 2012.
- [w26] D. Trossen, X. Vasilakos, P. Flegkas, V. Sourlas, G. Parisi, "Mobility Work Re-Visited Not Considered Harmful ", Third IEEE International Workshop on Mobile Computing and Networking Technologies (WMCNT 2011.), Budapest, Hungary, October, 2011.
- [w27] V. A. Siris, X. Vasilakos, G. C. Polyzos, "A Selective Neighbor Caching Approach for Supporting Mobility in Publish/Subscribe Networks", 5th ERCIM Workshop on eMobility (in conjunction with WWIC 2011.), Vilanova, Catalonia, Spain, June, 2011.
- [p28] V. Giannaki, X. Vasilakos, G. Xylomenos, G. C. Polyzos, "Supporting Mobility in a Publish Subscribe Internetwork Architecture", IEEE ISCC, Corfu, Greece, 2011.
- [w29] X. Vasilakos, J. Sacha, G. Pierre, "Decentralized As-Soon-As-Possible Grid Scheduling: a Feasibility Study", 19th Computer

Technical Reports

- [t1] X. Vasilakos, N. Nikaein, D. H. Lorenz, N. Ferdosian, "Integrated Methodology to Cognitive Network Slice Management in Virtualized 5G Networks", CoRR abs/2005.04830 (2020.). Available here and by arXiv.org as arXiv:2005.04830v1[cs.NI]
- [t2] B. Koksai, R. Schmidt, X. Vasilakos, N. Nikaein, "CRAWDAD dataset eurecom/elasticmon5g2019. (v. 2019-08-29)." <https://crawdad.org/eurecom/elasticmon5g2019./2019.0829>, Aug. 2019.
- [t3] G. Xylomenos, A. Phinikarides, I. Doumanis, X. Vasilakos, Y. Thomas, D. Trossen, M. Georgiades, S. Porter, "IPTV Over ICN", CoRR abs/1804.07509, 2018. Available via arXiv.org 1804.07509v2 [cs.NI]
- [t4] G. Xylomenos, Y. Thomas, X. Vasilakos, M. Georgiades, A. Phinikarides, I. Doumanis, S. Porter, D. Trossen, S. Robitzsch, M. J. Reed, M. F. Al-Naday, G. P. Petropoulos, K. V. Katsaros, M.-E. Xezonaki, J. Riihijärvi, "IP Over ICN Goes Live", CoRR abs/1804.07511, 2018.
- [t5] V. A. Siris, X. Vasilakos, G. C. Polyzos, "Efficient Proactive Caching for Supporting Seamless Mobility", in arXiv:1404.4754[cs.NI], 2014.
- [t6] V. Giannaki, X. Vasilakos, G. Xylomenos, G. C. Polyzos, "Supporting Mobility in a Publish Subscribe Internetwork Architecture", Mobile Multimedia Laboratory, Technical Report, 2011.-MMLAB-TR-001, 2011.
- [t7] K. Katsaros, N. Fotiou, X. Vasilakos, C. Ververidis, C. Tsilopoulos, G. Xylomenos, G. C. Polyzos, "H-Pastry: An Adaptive Multi-level Overlay Inter-Network", Mobile Multimedia Laboratory, Technical Report, 2011.-MMLAB-TR-003, 2011.

Ph.D. Thesis

X. Vasilakos, "Mobility-based Proactive Caching Models for Addressing Niche Mobile Demand and Scalable ICN Name Resolution Designs", A dissertation submitted in partial satisfaction of the requirements for the degree Doctor of Philosophy in Computer Science, Athens University of Economics and Business, School of Information Sciences and Technology, Department of Informatics, Mobile Multimedia Laboratory, Trias 2, GR-113 62, Athens, Greece, 2017.