

# Xenofon Vasilakos

## Lecturer

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[UoB profile](#)



[twitter.com/xvasilakos](https://twitter.com/xvasilakos)



[LinkedIn](#)

My name is Xenofon Vasilakos. I am a Lecturer with the University of Bristol (UnivBRIS), Bristol, the UK. My research is aligned with Bristol Digital Futures Institute (BDFI) and the Smart Internet Lab (SIL).

My experience includes participation in twelve research projects: x9 EU funded (including the FIA award-winning FP7-PURSUIT), one industrial project funded by Samsung Research UK (as lead researcher of Zero Downtime Edge Application Mobility), one Greek and one French grant-based project. Before joining UnivBRIS, I worked as a postdoctoral fellow at Eurecom Graduate School and Research Center in Digital Sciences in Sophia-Antipolis, the French Riviera, awarded and funded by the French government LABEX (LABoratoires d'EXcellence) Postdoc Grant.

My research interests include 5G and beyond Multi-access Edge Computing (MEC) architectures, Cloud concepts and technologies, including SDN/NFV, network slicing, and pervasive networking, with particular interest on MEC solutions combined with applied Machine Learning (ML) intelligence towards ETSI-defined Zero-touch Self-Managed networking (ZSM).

I am frequent reviewer for prestigious journals and conferences like IEEE ToN, IEEE TMC, or IEEE IoT Journal, and a TPC member of IEEE ICC INGI Symposium. I also have a long teaching and student supervision experience since 2010 either as an assistant or full teaching staff member.

This detailed CV consists of section (A) as a short (in a glance) CV version followed by section (B) extensive details and a description of my academic and other professional activities from 2002 up to the present time; section (C) provides a complete list of publications so far, and section (D) includes an appendix.

## A. Short CV (outline)

### A1. Research

Overall, my research experience includes **12 projects**: nine participations in European research projects, a project supported by Samsung Electronics UK Limited and Samsung Research Korea, a Greek national project, and a French grant with excellence scholarship.

**Current Research:** From 2017 to the present, my research focuses on **SDN/NFV** software-based programmable network architectures with emphasis on **5G/6G** networks, multi-access edge computing (**MEC**), and Virtual Network Functions (VNF) placement and VNF profiling, but also network applications (**5G/6G NetApps**). I have also dealt with IoT and Industrial IoT (IIoT) networks and network slicing. An essential part of the above-investigated solutions concerns models based on (or inspired by) Machine Learning (**ML**) for management and **orchestration** with the ultimate goal of autonomous (zero-touch, **ZSM**) networking of 5G/6G networks.

**Past Research:** During my PhD studies, I researched architectures, protocols and distributed solutions for the Future Internet. Most of my work has focused on the Information Centric Networking (*ICN*) network architecture design paradigm, as well as mobile and wireless network solutions for (and above of) the link and medium access control (MAC) layer. It is worth noting that a significant part of my research on *proactive* caching/storage and generally resource offloading for mobile users is related to *SDN design principles* and *programmable networks*.

### A2. Teaching experience & student supervision

Since 2020, I have been teaching and unit director of the Digital Circuits and Systems course, including microcontroller programming workshops. The course covers both semesters of first-year BEng/MEng studies in Electrical and Electronic Engineering.

I have closely collaborated and/or co-coordinated PhD candidates' research in the past, while currently I supervise as a primary PhD supervisor Mr Yuelin Liu for his provisional research topic area of "SDN and NFV Based Edge Computing Architecture" funded by the Chinese Research Council.

I have worked as a lecturer or teaching assistant in various graduate or undergraduate level courses such as "Distributed Systems", "Operating Systems", "Android Programming", and "Java Programming", among others.

### A3. Other academic activity

I am a regular reviewer for prestigious international conferences and journals, and a TPC member of the IEEE ICC INGI Symposium since 2021.

I have been/am a reviewer for EPSRC UKRI research proposals.

I actively participate in forums and discussion groups and give talks related to the above fields, most of which are publicly available (searchable via researchgate.net and YouTube). In addition, I follow the 6G Smart Networks and Services Industry Association (6G-IA) as a member of the Smart Internet Lab. Also, as a member of Smart Internet Lab and the 5GASP project consortium of researchers, I participate in the group discussions of "ICT-41 Projects cooperation".

I have been a member of PhD examination & awarding committees, as well as an external consultant for course material and (re-)structuring processes.

I hold the administrative role of "Y1 tutor" since 2021, with the primary task of healthy adaptation and training of first-year students.

## B. Detailed description

### B1. Working experience

**BDFI | Smart Internet Lab | EEEng. Dept., University of Bristol, Bristol**

➤ Sept. 2020 - now:

**(1) Lecturer with the Dept. of Electrical and Electronic Engineering**

- SDN/NFV architectures, platforms and designs
- MEC & Cloud (arch. Design, services with Docker, Kubernetes, orchestration with OSM-MANO, ZSM paradigm for autonomous networking with ML models)
- ZSM & ML models: Using Machine Learning (ML) to achieve Zero-touch Service network Management (ZSM)
- IoT/IIoT for 5G & 6G
- Member of Bristol Digital Futures Institute (BDFI)
- Member of Smart Internet Lab
- Technical lead for the Zero Downtime Edge Application Mobility (ZeroDEAM) project funded and in a two-year collaboration with Samsung Research UK (2020-2021)
- H2020 5GASP (36 month EUC funded project)

2019-Now  
Univ. of  
Bristol

**(2) Bristol Digital Futures Institute (BDFI), academic member**

- Interdisciplinary research

➤ May 2019 – August 2020:

**(3) Research Fellow, High Performance Networks group, Smart Internet Lab**

- SDN/NFV, MEC/Cloud, ML, IoT for 5G
- Projects: EU H2020 5GinFIRE και 5G VICTORI

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**Postgraduate research fellow, Mosaic5G, Eurecom, Sophia-Antipolis**

**(4) Oct. 2017 - March 2019: Postdoctoral Fellow**

- Member of Mosaic 5G for open source 5G platforms.
- Funded by the LABEX (LABoratoires d'Excellence) Postdoc Grant.
- 5G slicing research within the context of H2020 SliceNet and H2020 5G-PICTURE.

2017-2019  
@Mosaic5G,  
Eurecom

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**Mobile Multimedia Laboratory, Οικονομικό Παν. Αθηνών**

**(5) March 2016 – August 2017: Postdoc researcher**

- EU FP7 Project H2020 iP Over IcN - the betTer IP (POINT)

2009-2017  
@MMLab,  
ΟΠΑ

**(6) Feb 2010 - Feb 2016: PhD researcher**

- I-CAN; FP7-PURSUIT; FP7-PSIRP

**(7) Aug 2009 - Feb 2010: Junior software engineer & researcher**

- EU FP7 Project PSIRP. PSI ICN arch. development

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**DBS A.E. - Junior Java programmer**

**(8) Sep 2005 – Feb 2007**

Internship (09/2005-02/2006) followed by part-time employment (03/2006-02/2007) for "DBS – Dynamic Business Solutions A.E."

2005-2007  
DBS S.A.

- worked as an intern and, later, as a junior java developer on various projects and tasks using:
  - Servlets, JSPs and JSF technologies;
  - Explored the use of Oracle JDeveloper to leverage (back at the time novel) dev-automation features such as java struts.
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## B2. Research Projects (x12)

5GASP aims at fostering rapid development and testing of new and innovative NetApps built using the 5G NFV based reference architecture. Building on top of existing physical infrastructures, 5GASP intends to focus on innovations related to the operation of <b>5G NetApp</b> and other experiments and tests across several domains, providing software support tools for Continuous Integration and Continuous Deployment (CI/CD) of <b>NetApps</b> and <b>VNFs</b> . <a href="https://www.5gasp.eu/">https://www.5gasp.eu/</a>	2021/01-Now <b>ICT-42 5GASP</b>
The Zero Downtime <b>Edge</b> Application Mobility (ZeroDEAM) project targets 5G services with strict performance requirements, particularly, regarding real-time communication and the problem of service "downtime" after handover events. Popular uses cases falling within the context of ZeroDEAM include eXtended Reality (XR), multi-user interactions (including gaming) and 3D holographic services. ZeroDEAM offers a distributed and low-latency access manner for running Artificial Intelligence (AI) / Machine Learning ( <b>ML</b> ) models aimed at fighting <b>Downtime</b> , improving resource utilisation efficiency, and increasing the overall mobile user experience. <a href="http://www.bristol.ac.uk/engineering/research/smart/projects/zerodeam/">www.bristol.ac.uk/engineering/research/smart/projects/zerodeam/</a> <a href="http://www.bristol.ac.uk/engineering/research/smart/projects/zerodeam/">www.bristol.ac.uk/engineering/research/smart/projects/zerodeam/</a>	2020/01-2022/03 <b>ZeroDEAM</b>
5G-VICTORI provides 5G solutions for verticals via developing 5G infrastructures for large-scale trials to address a wide range of applications with flexible architectures. <a href="http://www.5g-victori-project.eu/">www.5g-victori-project.eu/</a>	2020/1-2020/08 <b>5G VICTORI</b>
5GinFIRE focuses on building and operating an Open and Extensible 5G NFV-based Reference ecosystem of experimental facilities that integrates existing FIRE facilities with new vertical-specific ones. <a href="https://5ginfire.eu/">https://5ginfire.eu/</a>	2019/5-2019/12 <b>5GinFire</b>
5G new technologies, with an emphasis on ML and <b>MEC</b> architectures. Research activities related to Mosaic 5G ( <a href="http://mosaic-5g.io/">http://mosaic-5g.io/</a> ) for flexible <b>5G open source SDN platforms</b> , particularly the LL-MEC 5G platform. <a href="https://5g-ppp.eu/slicenet/">https://5g-ppp.eu/slicenet/</a>	2017/10-2019/3 <b>SliceNet</b>
5G novel technologies, with an emphasis on ML solutions and the paradigm shift from "traditional" 4G RAN to the wireless network segment supported by Cloud technologies (Cloud RAN - C-RAN). Research activities related to Mosaic 5G ( <a href="http://mosaic-5g.io/">http://mosaic-5g.io/</a> ). <a href="https://5g-ppp.eu/5g-picture/">https://5g-ppp.eu/5g-picture/</a>	2017/10-2019/3 <b>5G-Picture</b>
Ο στόχος του έργου "IP over ICN – better IP" (POINT) ήταν η ανάπτυξη καινοτόμων τεχνολογιών για εμπορικά βιώσιμες εφαρμογές IP-over-ICN, με βάση την υπόθεση ότι πολλές τρέχουσες εφαρμογές που βασίζονται στην υπάρχουσα τεχνολογία IP μπορούν να λειτουργούν «καλύτερα» σε ένα <b>Δεδομενοκεντρικό δίκτυο σε σχέση με τα υπάρχοντα δίκτυα IP</b> . <a href="http://www.point-h2020.eu/">www.point-h2020.eu/</a>	2016/3-8/2017 <b>EU H2020-POINT</b>
Information-Centric future mobile and wireless Access Networks (I-CAN) focused on the massive penetration of smartphones and mobile social networks. My research contribution focused on distributed proactive caching solutions for enchanting mobility support. <a href="http://mm.aueb.gr/i-can/">mm.aueb.gr/i-can/</a>	2/2014-4/2015 <b>I-CAN Research Funding Program ARISTEIA II</b>
PURSUIT directly built on the results from the former FP7 project PSIRP. I focused on architectures for global rendezvous resolution and seamless mobility support. <a href="http://www.fp7-pursuit.eu/">www.fp7-pursuit.eu/</a>	9/2010-12/2012 <b>FP7-PURSUIT</b>
The PSIRP project tried to redesign the Internet architecture from a publish-subscribe (pub/sub) point of view, following a clean-slate approach that took nothing -not even IP- for granted. My personal participation focused on network-level rendezvous resolutions. <a href="http://www.psirp.org">www.psirp.org</a>	9/2009-9/2010 <b>FP7-PSIRP</b>
XtreemOS: EU research project (IP project #IST-FP6-033576 under the FP6 program) aimed to build an operating system for Grid computing, providing for Grids what a traditional operating system offers, i.e. hardware transparency and secure resource sharing between different users. My role was on Distributed Grid Scheduling, with results published in the work of X. Vasilakos et al., "Decentralized As-Soon-As-Possible Grid Scheduling: a Feasibility Study", 19th Computer Communications and Networks (ICCCN), 2010. <a href="https://research.vu.nl/en/publications/xtreemos-a-sound-foundation-for-cloud-infrastructure-and-federati">https://research.vu.nl/en/publications/xtreemos-a-sound-foundation-for-cloud-infrastructure-and-federati</a> <a href="http://www.globule.org/?page_id=90">http://www.globule.org/?page_id=90</a>	2/2009-8/2009 <b>Globule/XtreemOS</b> (IP #IST-FP6-033576)

## B3. Education & theses titles

- ❖ PhD in Computer Science  
Athens University of Econ. and Business, School of Information Sciences and Technology, the Dept. of Informatics.

Thesis title: *Mobility-based Proactive Caching Models for Addressing Niche Mobile Demand and Scalable ICN Name Resolution Designs.*

2017  
PhD, AUEB

Supervised by: **Assoc. Prof. Vasilios Siris**

During my Ph.D. studies, I conducted research on clean-slate Information-Centric Networking (ICN) architectures, protocols and distributed solutions for the Future Internet, with an emphasis on (i) global Rendezvous as well as (ii) proactive caching and multicast solutions that enhance mobility support in both ICN and traditional IP-based networks.

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- ❖ Master of Science degree in Parallel and Distributed Computer Systems  
*Vrije Universiteit van Amsterdam, Parallel and Distributed Computer Systems to master's*

Thesis title: *DGSasap: A Decentralised Grid Scheduler for as-soon-as-possible Scheduling.*

2009  
MSc diploma,  
VU Amsterdam

Published work at ICCCN 2010: Decentralised As-Soon-As-Possible Grid Scheduling: a feasibility study, GridPeer2010 in association with ICCCN2010, Zurich, August 2010.

Supervised by: Assoc. Prof. **Guillaume Pierre**

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- ❖ Bachelors in informatics  
AUEB

Thesis title: *Named Entity Recognition in Greek Texts with an Ensemble of SVMs and Active Learning*

*Published at* International Journal of Artificial Intelligence 2008: Named Entity Recognition in Greek Texts with an Ensemble of SVMs and Active Learning, International, Journal on Artificial Intelligence Tools, 16(6):1015-1045, World Scientific, 2007.

2007  
BSc, AUEB

Supervised by: Assoc. Prof. **Ion Androutsopoulos**

## B4. Academic experience in teaching & student supervision<sup>1</sup>

### Course units

▪ Digital Circuit Systems (2020/21, 2021/22, 2022/23)	University of Bristol undergraduate courses
▪ Mobile Applications and Services (2017/18, 2018/19)	2017-19 (Eurecom) graduate courses
▪ Topics in Multimedia Systems [TA <sup>2</sup> ] (2011/2012)	2010-16 (AUEB)
▪ Mobile and Pervasive Systems [TA] (2011/2012)	assistant for graduate courses
▪ Distributed Systems [TA] (2009/2010)	
▪ Mobile and Wireless Networks [TA] (2013/2014-2014/2015)	2010-16 (AUEB)
▪ Operating Systems [TA] (2012/2013, 2013/2014)	assistant for Undergraduate
▪ Introduction to Programming [TA] (2010/2011, 2012/2013)	courses
▪ Programming with the Java programming language [TA] (2009/2010, 2011/2012)	
▪ Distributed Systems [TA] (2009/2010-2010/2011)	
▪ Telematic Applications Programming (2013)	Harokopeion University of Athens (2013) Graduate course

### Supervision / closely worked with<sup>3</sup>

Overall since 2010, I have supervised or co-supervised over 35 students. Since 2019 to the present time at the University of Bristol:

1. PhD supervision of Mr Yuelin Liu with provisional research title "SDN and NFV Based Edge Computing Architecture" and scholarship funding from CRC (Chinese Research Council).
2. I worked closely with 2 PhD students (Mr Monchai Bunyakitanon, Alex Mavromatis)
3. Supervised (+currently supervising) 17 (+5) master level theses, of which two are in collaboration with industrial projects, as well as 1 (+2) graduate thesis.
4. Co-examiner or supervised 17 undergraduate students, 13 postgraduate students, and 2 working groups of third-year students.

## B5. Reviewer for submitted articles and project proposal

- ❖ Publons profile: <https://publons.com/researcher/3099344/xenofon-vasilakos/peer-review/>
- ❖ Conference TCP member: IEEE ICC'22 - NGNI Symposium
- ❖ EPSRC UKRI

IEEE ToN, IEEE TMC, IEEE IoT Journal, IEEE TVT, IEEE TNSM, IEEE TCCN, IEEE Communications Magazine, Elsevier Computer Communications, IEEE Global Internet Symposium, IFIP Networking, ACM ICN, IEEE Communications Letters, IEEEELCN, Oxford Journals Computer Journal, IEEE WoWMoM, IEEE INFOCOM, IEEE ICC, ISCC, NGI

## B6. Forums and talks

<sup>1</sup> Updates here: <http://pages.cs.aueb.gr/~xvas/pages/ta.htm>

<sup>2</sup> TA: Teaching assistant

<sup>3</sup> Details: <http://pages.cs.aueb.gr/~xvas/pages/ta/details.htm>

I attend as a member of SIL the 6G-IA working groups "Open Smart Networks and Services WG" and "Vision and Societal Challenges WG". As a member of SIL and the 5GASP project, I participate in the discussions of the representative group "ICT-41 Projects cooperation". I actively participate in discussions and give talks about the above fields of research (e.g. talk given at ECOC 2022, KTH Digital Futures, Dive-Deep Seminar Series, etc.), most of which are publicly available (see researchgate.net and YouTube).

## B7. General and Technical skills

Proposal writing; Research Project Management; Java; C++; C; MPI; JSF; Primefaces; Teensy/Arduino microcontrollers programming με C, Android development; Kubernetes/Docker/runC; OMNeT++ Network Simulator; Mininet; SQL; ElasticSearch; Simulation Setup and Running; LaTeX; Technical Writing; Technical Presentations; Distributed Systems/algorithms; Parallel Programming; Linux (Ubuntu); MS Windows; NetBeans; Eclipse; Android Studio; SVN; GIT.

## B8. Other certifications or knowledge acknowledgements / Foreign languages

- UKPSF AdvancedHE
  - Postgraduate certificate in academic practice (2022)
  - Certification of Fellow of Higher Education Academy (2022).
  - Certification of Associate Fellow of Higher Education Academy (2021)
- Certificate of Proficiency in English, Cambridge University (2000)
- Elementary proficiency, Zertifikat Deutsch, Goethe-Institut (2005)
- *Greek (native)*
- *French(basic knowledge): public education / self-practice*

## B9. Awards or honours

### At personal level

▪ LABEX (LABoratoires d'EXcellence) French government grant	2018 – Laboratoires d'excellence Postdoc Grant
▪ 2003-2004, honouring scholarship by Greek government's IKY	2003, 2004
▪ 2002-2003, honouring scholarship by Greek government's IKY	Greek Government IKY <sup>4</sup>
▪ 2002-2003, accolade by Greek government's IKY	2002 - IKY <sup>5</sup> :βραβείο
▪ My graduation grade placed me at 0.64% of students admitted in the academic year 2002-2003.	Κορυφαία επίδοση πτυχίου

### At group level

The PURSUIT project received the Future Internet Award for its outstanding contribution to redefining the existing Internet design in order to ensure users' stronger control over their data while enhancing broadband connections.

- FIA press release: <https://ec.europa.eu/digital-single-market/en/news/award-winning-eu-project-redefines-internet-strengthening-users-online-safety-while-boosting>

AUEB MMLab research review article included within 21 top publications from Greek institutions for the period of 2011-2018, having over 400 (strictly non-self) references.

- <https://www.aueb.gr/el/content/arthro-ton-melon-toy-ergastiriou-asyrmaton-diktyon-kai-polymesikon-tilepikoinonion-mmlab-toy>
- [http://s.kathimerini.gr/resources/2018-12/s17\\_091218\\_paideia-dhmosieyseis-thumb-large.jpg](http://s.kathimerini.gr/resources/2018-12/s17_091218_paideia-dhmosieyseis-thumb-large.jpg)

<sup>4</sup> Please, refer to I.a and I.b at appendix.

<sup>5</sup> Please, refer to appendix section I.c.

## C. Full list of publications

Peer-reviewed published: 37

- 27 in conference proceedings (18 main track, 8 workshops, 1 demo)
- 10 in periodicals (9 journals, 1 magazine)

Technical reports: 7

### C1. Journals (m for 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

### C2. In conference proceedings (w for workshops, d for demos)

- [p1] 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
- [p2] N. Uniyal, J. Parra-Ullauri, S. Olowu, A. Bravalheri, X. Vasilakos, R. Nejabati and D. Simeonidou, "On the design of a native Zero-touch 6G architecture", 47th World Wireless Forum meeting (WWRF47), Bristol, United Kingdom, 21-23 June, 2022
- [p3] 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



- [p4] N. Uniya, 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
- [p5] 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
- [p6] 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
- [p7] X. Vasilakos, W. Featherstone, N. Uniya, et al., "Towards Zero Downtime Edge Application Mobility for Ultra-Low Latency 5G Streaming", IEEE Cloud Summit 2020, October 21-22, virtual conference, 2020
- [w8] 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
- [w9] 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
- [p10] 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
- [p11] 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
- [p12] 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
- [d13] 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
- [p14] 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
- [w15] 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
- [p16] 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
- [p17] 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
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### C4. PhD Thesis

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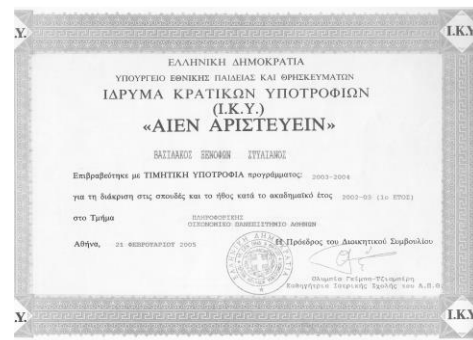
## D. Appendix

### I. IKY

#### I.a. Honouring Scholarship 2002/2003



#### I.b. Honouring Scholarship 2002/2003



#### I.c. Accolade 2003/2004



## II. Other interests

- 1994 - 1996: Basketball team member “Γυμναστικός Σύλλογος Χαλανδρίου (ΓΣΧ)”
- 1996 - 2002: Basketball team member “Φιλοπρόοδος Όμιλος Τούφας (Φ.Ο.Τ.) Χαλανδρίου”
- 2002 - 2007: 100m spring “Γυμναστικός Σύλλογος Χαλανδρίου (ΓΣΧ)”

Now:

- Sports/gym, reading books, watching science and history documentaries.
- International Rescue Committee (IRC)