

LALLAS EFTHYMIOS CV

Assistant Professor

Department of Forestry, Wood Science and Design University of Thessaly,
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A. CONTACT INFORMATION

NAME : LALLAS EFTHYMIOS
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B. STUDIES

- 2007 National Capodistrian University of Athens (EKPA) Informatics and Telecommunications Dept. Phd in Network Design'
- 2001 National Capodistrian University of Athens (EKPA) Informatics and Telecommunications Dept.. Msc in Telecommunications.
- 1996 National Capodistrian University of Athens (EKPA) Physics Dept.

C. ACADEMIC EXPERIENCE

- 11/2020-present **Assistant Professor** Department of Forestry, Wood Science and Design, of University of Thessaly, subject «**Network Systems Design and Applications in the Wood-Furniture sector** »
- 3/2019 **Assistant Professor** General Department of University of Thessaly, subject «**Network Systems Design**»
- 4/2014 **Assistant Professor** Department of Informatics Engineering of TEI of STEREA ELLADA, subject «**Network Systems Design**»

D. SCIENTIFIC INTERESTS

- Network System Architectures and devices (Routing-Switching-Protocols, Broadband, Optical Wireless-Sensor IOT Systems), Network on Chip Architectures (NoC), Network Computing System Design and Technoeconomical Evaluation, Network System Security and Blockchain, Cognitive Devices and Systems and Intelligent Home Networks, Design of network systems for the optimization of performance of the Wood - Furniture and Forest Product enterprise.

E1. PROJECT AND PROFESSIONAL EXPERIENCE

- April 2019 **Research Associate** in project **CHIST-ERA (H2020 Horizon 2020 Future and Emerging Technologies programme)** " Smart Pharmaceutical Manufacturing, SPuMoNI (code 6394)
- 2018-2019 **Research Associate** in project : Administration of Educational Units (code:6081.04
- 1/9/2014 - 31/5/2015 **Research Associate** for **AIT(Athens Information Technology) research center of excellence** in project **IST FP-7 "Nano Scale Disruptive Silicon Plasmonic Platform for Chip to Chip Interconnection NAVOLCHI"**

- 2002-2004, 2005-2007 Research Associate** and Director for training of Small and Medium scale Enterprises on E-Commerce for the projects “**NETWORKING I**” and “**NETWORKING II**” . Φορέις General Secretariat for Industry Hellenic Ministry of Development, GRNET & University of Athens.
- 1/1/2004 - 31/8/2004 Research Associate** for Dept of Informatics, EKPA university, in project “**IST (FET-OPEN) - OCCULT** Optical Chaos Communications Using Laser Diodes Transmitters ”.
- 1/1/2001-30/4/2001. Research Associate** for Dept of Informatics, EKPA university, in project **EURESCOM P917 “ADSL pilot Network for Fast Internet and Multimedia services”**.
- 1/1/2000 - 30/6/2000 Research Associate** for Dept of Informatics, EKPA university **EURESCOM P918 “Integration of Internet Protocol over Optical Networks”**.

E2. OTHER PROFESSIONAL EXPERIENCE

- 19/6/2006-30/6/2011 Director of Lifelong Learning Units** for Fokida Municipality, for IDEKE institute of Lifelong Learning Registry of Ministry of Education.
- 23/5/2005-15/6/2006 Network Product Manager** in **HUAWEI TECHNOLOGIES SA**

F. POSTGRADUATE AND UNDERGRADUATE TAUGHT COURSES

- 11/2020- up-to-date Assistant Professor** Department of Forestry, Wood Science and Design, of University of Thessaly (α *undergraduate courses*: Introduction to Computer Science, Statistics and Data Analysis, (β *postgraduate courses*: Intelligent Automation technologies in furniture and interior design, Industry 4.0 applications.
- Acad. yrs 2015-2018 Lecturer** (under contract 407/80), Informatics Dept, University of Thessaly courses: Data Networks, Graph Theory
- 4/2014 – 11/2020 Assistant Professor** Department of Informatics Engineering of TEI of STEREA ELLADA. Courses: Network Design, Network Algorithms, Network System Security, Wireless Networks.
- Acad. yrs 2006-2013 Research Associate** TEI of STEREA ELLADA. Courses ‘Data Networks’, ‘Network Design’, ‘Introduction to Informatics’, ‘Management Information Systems’, ‘E-commerce and Databases’, ‘Multimedia Technology’, ‘Telecommunications and Radar’)

G. ADMINISTRATIVE EXPERIENCE

- Academic year 2020-2021: Director for the former Department of Informatics Engineering of TEI of STEREA ELLADA

- Academic director in project : Administration of Educational Units for the former TEI of STEREA ELLADA.
- Member of the task force group for General Data Protection Regulation for the former TEI of STEREA ELLADA.
- April 2018 – up-to-date: ERASMUS Academic director for the former Department of Informatics Engineering of TEI of STEREA ELLADA
- Member of Special Funds and Research Account (ELKE) for the former Department of Informatics Engineering of TEI of STEREA ELLADA (2015-2020)
- 1/10/2014 – 31/3/2015, 1/4/2015 – 13/10/2015: Supervisor of student practice experience for the former Department of Informatics Engineering of TEI of STEREA ELLADA.
- Member of evaluation committee for the recruitment of prospective research associates for the former Department of Informatics Engineering of TEI of STEREA ELLADA (yrs 2015-2016 and 2017-2018)
- Director (Dec 2018- Sept 2018) and member (2018-2020) of student practice experience committee for the former Department of Informatics Engineering of TEI of STEREA ELLADA

H. PUBLICATIONS

H1. Phd DISSERTATION

- [1] Phd Dissertation «Design and implementations of a novel Signaling Method for Optical Packet Switching Network» EKPA University, June 2007, Athens.

H2. INTERNATIONAL CONFERENCES AND JOURNAL PUBLICATIONS (UNDER JUDGEMENT)

- [2] **E. N. Lallas**, N. Skarmoutsos and D. Syvridis, “A new all optical label swapping method based on optical FSK header encoding on the intensity modulated payload”, European Conference of Optical Communications 2002, Copenhagen, Denmark, Paper 5.5.2, Sept. 8-12, 2002.
- [3] **E. N. Lallas**, N. Skarmoutsos and D. Syvridis, “An optical FSK based label coding technique for the realization of the all optical label swapping”, **IEEE Photon. Technol. Lett.** vol. 14. pp. 1472-1474, Oct. 2002.
- [4] **E. N. Lallas**, N. Skarmoutsos, and D. Syvridis, “Coherent encoding of optical FSK header for all optical label swapping systems”, **IEEE Journal of Lightwave Technology**, v. 22, pp. 2256-2263, September 2004.
- [5] N. Skarmoutsos, **E. N. Lallas**, and D. Syvridis, “A new high bit rate orthogonal IM/FSK scheme based on an all fiber realization, for AOLS applications”, European Conference of Optical Communications 2005, Glasgow, Scotland, Paper P091, We4, Sept. 25-29, 2005.
- [6] N. Skarmoutsos, **E. N. Lallas**, D. Syvridis and T. Spicopoulos “A 40Gb/s IM payload / 2.5Gb/s header AOLS technique based on an all fiber realization”, **Elsevier Optical switching & networking**, (5) March 2008, pg 244-252.
- [7] **Efthymios Lallas** “Security issues for hotel information systems”, DRATTE 1st International Conference on Tourism & Hospitality Management, pg. 243-258, 13-15 June 2008, Athens Greece

- [8] Christos A. Thraskias, **Eythimios N. Lallas** , Niels Neumann, Laurent Schares, Bert J. Offrein, Ronny Henker, Dirk Plettemeier, Juerg Leuthold and Ioannis Tomkos "Survey of Photonic and Plasmonic Interconnect Technologies for Intra-Datacenter and High-Performance Computing Communications," in IEEE Communications Surveys & Tutorials, vol. 20, no. 4, pp. 2758-2783, Fourth quarter 2018, doi: 10.1109/COMST.2018.2839672.
- [9] **E. N. Lallas** ; A. Xenakis ; G. Stamoulis ; J. Korinthios "QoS and MPLS design issues in NoCs", Published in: 2018 South-Eastern European Design Automation, Computer Engineering, Computer Networks and Society Media Conference (SEEDA_CECNSM), 22-24 Sept. 2018, Kastoria, Greece, Date Added to **IEEE** Xplore: 29 November 2018, DOI: 10.23919/SEEDA-CECNSM.2018.8544942
- [10] **Efthymios N. Lallas**, "A survey on all optical label swapping techniques: Comparison and trends," Elsevier OSN - Optical Switching and Networking, Volume 31, 2019, Pages 22-38, ISSN 1573-4277, <https://doi.org/10.1016/j.osn.2018.08.002>.
- [11] Apostolos Xenakis, Anthony Karageorgos, **Efthymios Lallas**, Adriana E. Chis, Horacio González-Vélez, "Towards Distributed IoT/Cloud based Fault Detection and Maintenance in Industrial Automation," Elsevier Procedia Computer Science, Volume 151, 2019, Pages 683-690, ISSN 1877-0509, <https://doi.org/10.1016/j.procs.2019.04.091>.
- [12] **Efthymios N. Lallas** "A survey on key roles of optical switching and labeling technologies on big data traffic of Data Centers and HPC environments", AIMS Electronics and Electrical Engineering Journal, Volume 3, Issue 3, pp. 233–256, June 2019, DOI:10.3934/ElectrEng.2019.3.233
- [13] **Efthymios N. Lallas** ; Apostolos Xenakis ; Georgios Stamoulis "A generic framework for a Peer to Peer Blockchain based Fog Architecture in Industrial Automation", Published in: 2019 4th South-East Europe Design Automation, Computer Engineering, Computer Networks and Social Media Conference (SEEDA-CECNSM), 20-22 Sept. 2019, Piraeus, Greece, Date Added to **IEEE** Xplore: 21 November 2019, DOI: 10.1109/SEEDA-CECNSM.2019.8908360
- [14] **E.N. Lallas** "Key Roles of Plasmonics in Wireless THz Nanocommunications—A Survey" December 2019, **MDPI** Applied Sciences 9(24):5488, DOI: 10.3390/app9245488
- [15] **E.N. Lallas** "Key Roles of Plasmonics in Wireless THz Nanocommunications—A Survey" in **MDPI** Special Issue "Modern Applications in Optics and Photonics: From Sensing and Analytics to Communication" ISSN 2076-3417.
- [16] Fátima Leal, Adriana E. Chis, Simon Caton, Horacio González-Vélez, Juan M. García-Gómez, Marta Durá, Angel Sánchez-García, Carlos Sáez, Anthony Karageorgos, Vassilis C. Gerogiannis, Apostolos Xenakis, **Efthymios Lallas**, Theodoros Ntounas, Eleni Vasileiou, Georgios Mountzouris, Barbara Otti, Penelope Pucci, Rossano Papini, David Cerrai, Mariola Mier, "Smart Pharmaceutical Manufacturing: Ensuring End-to-End Traceability and Data Integrity in Medicine Production," Elsevier Big Data Research, Volume 24, 2021, 100172, ISSN 2214-5796, <https://doi.org/10.1016/j.bdr.2020.100172>.
- [17] **Lallas, E.** (2021) "An Evaluation of Routing Algorithms in Traffic Engineering and Quality of Service Provision of Network on Chips". Engineering, 13, 1-17. doi: 10.4236/eng.2021.131001.
- [18] **Eythimios Lallas**, Anthony Karageorgos and Georgios Ntalos "An Ontology based approach for Regulatory Compliance of EU Reg. No 995/2010 in Greece", *European Federation for Information Technology in Agriculture, Food and the Environment (EFITA)* 2021 Conference, MDPI Engineering Proceedings 9, no. 1: 38. <https://doi.org/10.3390/engproc2021009038>.
- [19] **Efthymios Lallas**, Ilias Santouridis, Georgios Mountzouris, Vassilis C. Gerogiannis, and Anthony Karageorgos 2021. "An Ontology based Conceptualization of Data Integrity Regulatory Compliance in the Pharmaceutical Industry: The SPuMoNI Case": *ICPS (ACM) Conference Proceedings: In 25th Pan-Hellenic Conference on Informatics (PCI 2021)*, ISBN:978-1-4503-9555-7, 26 -28 November 2021, Volos, Greece.

H3. BOOK CHAPTER PUBLICATIONS

- [20] **E. N. Lallas** "AOLS technique survey and an all fiber realization" published in 'Advances in Optics: Reviews' Book Series, vol.4, chapter 4, pp. 95-116, 15 July 2019, IFSA Publishing. ISBN-13: 978-8409090143, ISBN-10: 8409090147
- [21] **Efthymios Lallas** "Key Roles of Plasmonics in Wireless THz Nanocommunications—A Survey" MDPI Open

Access Book as a printed edition of the Special Issue Modern Applications in Optics and Photonics: From Sensing and Analytics to Communication that was published in Applied Sciences, pg 73, ISBN 978-3-0365-0866-5 (Hbk); ISBN 978-3-0365-0867-2 (PDF), <https://doi.org/10.3390/books978-3-0365-0867-2>

- [22] **E.N. Lallas** "Key Roles of Plasmonics in Wireless THz Nanocommunications" **MDPI Encyclopedia**, 2020, v1, January 2020, Available online: <https://encyclopedia.pub/482>

H4. GREEK CONFERENCES AND JOURNAL PUBLICATIONS (UNDER JUDGEMENT)

- [23] Lallas Efthymios «The Security of Information Systems of a Hotel Unit as a Basic Element of Management», DRATTE journal "Tourism Issues", pg 52-71, no 4, Feb. 2008,
- [24] Lallas Efthymios, K.A. Papastaurou «Telematic Methods and Suggestions for Search and Management of Personnel for the local SMEs as a Factor for the Promotion of the Development and Production of the Local Region», 1^o scientific conference «Education Development and Production», pg 136-143, TEI Lamia, Amfissa 17-18 April 2008.
- [25] Lallas Efthymios «Contribution of Optical Communication Technology to the Evolution of Modern Telecommunication Data Networks Technology», EPY magazine Hellenic Society of Scientists and Professionals in Informatics and Telecommunications, pg.22-28, no 115, Oct/Dec 2008.
- [26] K. Sioutas, E. Lallas et al " Design and development of "smart" digital caliper for measuring wood and wood products ", *20th Panhellenic Forestry Conference* με τίτλο « Modern challenges of the forest in Greek Forestry and protection of the natural environment, 200 years after the Revolution of '21» Oct 2021.

H4. REVIEWER EXPERIENCE

- Peer Reviewer for Optical Switching and Networking (OSN) ELSEVIER journal,
- Peer Reviewer for Hindawi journal
- Peer Reviewer for Applied Sciences, Sensors, Electronics, Telecom, and Photonics journals of MDPI

H5. INVITED SPEAKER

- Invited presentation titled: "IoT and smart applications", CRESSON Winter School 17 - 21 January 2022, Ecole Nationale d' Architecture de Grenoble, and Department of Architecture of the Polytechnic school of the University of Thessaly in Volos (Greece).

H6. CITATIONS

230 citations with h-index = 7 according to Google Scholar

H7. AWARDS

- Certificate publication for MDPI special issue and MDPI book chapter.
- High IF (17,2) publication for IEEE magazine, Top rated "Research Interest" articles for 2018 and most read article on the first months of publication according to RG(Research Gate).
- Reviewer certificate for MPDI Telecom journal for the year 2020.