Curriculum Vitae
Panagiotis Th. Trakadas

1. Personal Information

Surname	**Trakadas**
Name	**Panagiotis**
Date of Birth	14 January 1972
Place of Birth	Athens
Marital Status	Married, two children
Telephone	+30 6945 972469
E-mail	trakadasp@gmail.com, ptrakadas@uoa.gr

2. Education

February 1998 – June 2001

PhD in the field of Information Transmission Systems and Materials Technology of the Department of Electrical and Computer Engineering of the National Technical University of Athens, entitled «*Analysis, Modeling, Evaluation of Electromagnetic Interference to Devices from Wireless Transmission System*s». Supervising Professor: Dr. Christos Capsalis.

The doctoral thesis was **awarded the Thomaidian Prize**, as the best PhD thesis of 2001 at the National Technical University of Athens (NTUA).

September 1991 – January 1997

Undergraduate studies at the Department of Electrical and Computer Engineering of the National Technical University of Athens. Successful examination in the thesis entitled "*Theoretical Study and Manufacture of Microstrip Antennas at 900 and 1800MHz Frequencies*" (Grade: 10). Supervising Professor: Dr Christos Capsalis.

3. Educational Work & Current Position

Associate Professor, Department of Port Management and Shipping, National and Kapodistrian University of Athens.

January 2022 – today
Lectures on "**Smart Ports**" course of the 8th semester of the Department of Port Management and Shipping, School of Economics and Political Sciences, NKUA.

September 2022 – today
Lectures on "**Artificial Intelligence**" course of the 7th semester of the Department of Port Management and Shipping, School of Economics and Political Sciences, NKUA.

September 2021 – today

Lectures on "**Management Information Systems**" course of the 7th semester of the Department of Port Management and Shipping, School of Economics and Political Sciences, NKUA.

September 2021 – today
Lectures on "**Introduction to Programming**" course of the 5th semester of the Department of Port Management and Shipping, School of Economics and Political Sciences, NKUA.

September 2020 – today
Lectures on "**Mathematics for Finance and Business Administration**" course of the 1st semester of the Department of Port Management and Shipping, School of Economics and Political Sciences, NKUA.

January 2021 – today
Lectures on "**Introduction to Databases**" course of the 6th semester of the Department of Port Management and Shipping, School of Economics and Political Sciences, NKUA.

January 2020 – today
Lectures on "**Information Technologies**" course of the 2nd semester of the Department of Port Management and Shipping, School of Economics and Political Sciences, NKUA.

March 2018 – today
Lectures on "**Web-based Applications Development**" courses of the 6th semester of the Department of Electrical Engineering, School of Technological Applications, of the former **Technological Educational Institute** (T.E.I) **of Halkida**.

March 2018 – today
Lectures on "**Internet Technologies**" courses of the 5th semester of the Department of Electrical Engineering, School of Technological Applications, of the former **Technological Educational Institute** (T.E.I) **of Halkida**.

March 2018 – today
Lectures on "**Mobile and Satellite Communications**" courses of the 7th semester of the Department of Electrical Engineering, School of Technological Applications, of the former **Technological Educational Institute** (T.E.I) **of Halkida**.

March 2018 – today
Lectures on "**Electronics I and II**" courses of the 1st and 2nd semester of the Department of Electrical Engineering, School of Technological Applications, of the former **Technological Educational Institute** (T.E.I) **of Halkida**.

March 2018 – today
Lectures on "**Communications Security**" courses of the Postgraduate course on Smart Grid Networks, of the former **Technological Educational Institute** (T.E.I) **of Halkida**.

March 2018 – today

Lectures on "**Communications Networking**" courses of the Postgraduate course on Smart Grid Networks, of the former **Technological Educational Institute** (T.E.I) **of Halkida**.

September 2008 – July 2009
Taught the "**Digital Systems I and II**" laboratory courses of the 3rd and 4th semester of the Department of Electrical Engineering, School of Technological Applications, of the **Technological Educational Institute** (T.E.I) **of Halkida**.

September 2003 – July 2004
Taught the «**Microwaves**» theoretical course of the 5th semester of the Department of Electronics and the «**Radar**» theoretical course of the 7th semester, School of Technological Applications of the T**echnological Educational Institute** (T.E.I.) **of Athens**.

September 2002 – July 2003
Taught the theoretical and laboratory course «**Microwaves**» of the 5th semester of the Department of Electronics, School of Technological Applications of the T**echnological Educational Institute** (T.E.I.) **of Athens**.

September 2000 – July2001
Educational work for the postgraduate course «**Introduction to Electromagnetic Compatibility**» of the **Department of Electrical and Computer Engineering of the National Technical University of Athens**.

February 1998 – July 2001
Taught and Created Laboratory Exercises for the courses «**Wireless Links and Electromagnetic Wave Propagation**» and «**Antennas**» of the 8th and 9th semester of the undergraduate curriculum of the **Department of Electrical and Computer Engineering of the National Technical University of Athens**.

4. Foreign Languages

L1. University of Michigan, Certificate of Proficiency in English

5. Participation in Research Programmes

January 2023 – December 2025
Participation in the **OASSES** research project in the framework of the European Union's Horizon Europe.

The massive increase in device connectivity and generated data has resulted in the proliferation of intelligent processing services to create insights and exploit data in a multi-modal manner. Currently, the most powerful data processing operates in a centralized manner at the cloud, which provides the ability to scale and allocate resources on demand and efficiently. Centralized processing and cloud hosting, bound and limit their services and applications to operate in a resource restricted manner, relying usually on large single entities to provide, i) Authentication, ii) Data storage, iii) Data processing, iv) Connectivity, v) Vendor-locked environments for development and orchestration. This significantly limits the user from its data governance and even identity management. Similarly, existing solutions for edge device authentication require a centralized entity to trust them and authenticate them, rendering a nonportable identification

paradigm. OASEES aims to create an open, decentralized, intelligent, programmable edge framework for Swarm architectures and applications, leveraging the Decentralized Autonomous Organization (DAO) paradigm and integrating Human-in-the-Loop (HITL) processes for efficient decision making. The OASEES vision is to provide the open tools and secure environments for swarm programming and orchestration for numerous fields, in a completely decentralized manner. An important aspect in this process is identification and identity management, in which OASEES targets the implementation of a portable and privacy preserving ID federation system, for edge devices and services, with full compliance and compatibility to GAIA-X federation and IDSA trust directives and specifications. This situation solidifies the need for an integrated enabler framework tailored to the edge's extreme data processing demands, using different edge accelerators, i.e. GPU, NPU, SNN and Quantum.

January 2023 – December 2025

Participation in the **TARDIS** research project in the framework of the European Union's Horizon Europe.

Developing and managing distributed systems is a complex task requiring expertise across multiple domains. This complexity considerably increases in swarm systems, which are highly dynamic and heterogeneous and require decentralised solutions that adapt to highly dynamic system conditions. The project TaRDIS focuses on supporting the correct and efficient development of applications for swarms and decentralised distributed systems, by combining a novel programming paradigm with a toolbox for supporting the development and executing of applications. TaRDIS proposes a language-independent event-driven programming paradigm that exposes, through an event-based interface, distribution abstractions and powerful decentralised machine learning primitives. The programming environment will assist in building correct systems by taking advantage of behavioural types to automatically analyse the component's interactions to ensure correctness-by-design of their applications, taking into account application invariants and the properties of the target execution environment. TaRDIS underlying distributed middleware will provide essential services, including data management and decentralised machine learning components. The middleware will hide the heterogeneity and address the dynamicity of the distributed execution environment by orchestrating and adapting the execution of different application components across devices in an autonomic and intelligent way. TaRDIS results will be integrated in a development environment, and also as standalone tools, both of which can be used for developing applications for swarm systems. The project results will be validated in the context of four different use cases provided by high impact industrial partners that range from swarms of satellites, decentralised dynamic marketplaces, decentralised machine learning solutions for personal-assistant applications, and the distributed control process of a smart factory.

January 2023 – December 2025

Participation in the **HORSE** research project in the framework of the European Union's Horizon Europe.

6G technologies, benefitting from softwarisation, Gb/s speed and sub-THz communications paradigms, open up opportunities for developing new and innovative network management strategies while navigating the evolution toward disaggregation, new software-based paradigms

in architecting and operating future connectivity platforms, and embracing features of computing, automation and smartness, trust, privacy and security. Supported by this technology evolution, as the vision of new, smart and innovative capabilities is becoming a reality, superb user experience is expected even in presence of mobility and resource volatility. However, the fundamentally new and unknown features of advanced, disaggregated, virtualized and multi-vendor 6G based infrastructures, challenge the security and resilience design to the next level, by managing the unknown, complex and highly versatile infrastructures as they evolve. Indeed, the future deployment of 6G networks is inextricably connected with an integration of diverse hardware elements and infrastructures, thus leading not only to a highly heterogeneous environment, but also to functions and features that cannot be anticipated at the time of design. The vision of HORSE in this complex scenario, is to deal with the technology solutions, and system evaluation not yet foreseen, towards an omnipresent, smart and secure network service provisioning in the future network-of-networks landscape. To this end, HORSE proposes a novel human-centric, open-source, green, sustainable, coordinated provisioning and protection evolutionary platform, which can inclusively yet seamlessly combine advancements in several domains, as they get added to the system (e.g., predictive threats detection, proactive business-wise threats and breaches mitigation actions, programmable networking, semantic communications, Network Function Virtualisation (NFV), intent-based networking, AI-based techniques, cross-layer management of physical layer features, etc.).

September 2022 – December 2025

Participation in the **ICOS** research project in the framework of the European Union's Horizon Europe.

The unstoppable proliferation of novel computing and sensing device technologies, and the ever-growing demand for data-intensive applications in the edge and cloud, are driving a paradigm shift in computing around dynamic, intelligent and yet seamless interconnection of IoT, edge and cloud resources, in one single computing system to form a continuum. Many research initiatives have focused on deploying a sort of management plane intended to properly manage the continuum. Simultaneously, several solutions exist aimed at managing edge and cloud systems through not suitably addressing the whole continuum challenges though.

The next step is, with no doubt, the design of an extended, open, secure, trustable, adaptable, technology agnostic and much more complete management strategy, covering the full continuum, i.e. IoT-to-edge-to-cloud, with a clear focus on the network connecting the whole stack, leveraging off-the-shell technologies (e.g., AI, data, etc.), but also open to accommodate novel services as technology progress goes on. The ICOS project aims at covering the set of challenges coming up when addressing this continuum paradigm, proposing an approach embedding a well-defined set of functionalities, ending up in the definition of an IoT2cloud Operating System (ICOS). Indeed, the main objective of the project ICOS is to design, develop and validate a meta operating system for a continuum, by addressing the challenges of: i) devices volatility and heterogeneity, continuum infrastructure virtualization and diverse network connectivity; ii) optimized and scalable service execution and performance, as well as resources consumptions, including power consumption; iii) guaranteed trust, security and privacy, and; iv) reduction of integration costs and effective mitigation of cloud provider lock-in effects, in a data-driven system built upon the principles of openness, adaptability, data sharing and a future edge market scenario for services and data.

September 2021 – May 2022

Participation in the **EFPF (open call for validation and testing)** research project in the framework of the European Union's Horizon 2020.

The proposal fits in validation category, employing 6 EFPF tools. The project comprises an opportunity for Pressious to establish Industry 4.0 principles including proactive resource management, environmental footprint minimization and production chain digitization by exploiting available datasets across the production chain. The output of this project will be a thorough testing and validation of these EFPF tools and the potential adoption of the platform after the project lifetime. For the purposes of this project, NKUA will capitalize experience in several, relevant FP7 and H2020 projects to support Pressious on integration of EFPF components in the manufacturing site, as well as on the execution of testing and validation phase of the project.

September 2021 – May 2022

Participation in the **ZDMP (open call for validation and testing)** research project in the framework of the European Union's Horizon 2020.

The present proposal falls into the scope of validation sub-projects, intending to demonstrate the usefulness of 14 ZDMP components. ZDMP open call comprises a unique opportunity for Pressious to establish the principles of Industry 4.0 under the circular economy paradigm, in terms of proactive resource management, zero-defect manufacturing, and environmental footprint minimization, by exploiting already available datasets across the production chain. The output of this project will be a thorough examination, testing and validation of these components in the industrial domain of offset printing and the potential adoption of ZDMP platform after the project lifetime.

September 2020 – August 2022

Participation in the **AFFORDBALE-5G** research project in the framework of the European Union's Horizon 2020 (H2020-ICT-5GPPP, ICT-42).

Affordable5G aims at creating a 5G network that will deliver a complete and affordable solution covering the needs of private and enterprise networks through technical innovation that span across all parts of 5G network, leveraging cell densification, RU/DU/CU split, hardware acceleration, edge computing and core network virtualization, seamlessly combined with the adoption of open-source RAN, MEC and MANO solutions, for cloud-native, micro-service based deployments.

September 2020 – February 2021

Participation in the **TrySMART** research project in the framework of the European Union's Horizon 2020 (H2020 **L4MS**).

TrySMART deals with the process of incorporating the cutting of fiberglass to be used as reinforcement for roof production, consisting of 5 steps: 1 - Mould gelcoat painting, 2 - Fiberglass placement, 3 - Vacuum bagging, 4 - Resin infusion and curing and 5 - Demoulding & Tool preparation. At the last step, the tool is cleaned and prepared for the next production cycle. The production of each product requires a full rotation across all steps.

September 2017 – February 2020

Participation in the **DEFENDER** research project in the framework of the European Union's Horizon 2020 (H2020–ICT-740898).

DEFENDER adapts, integrates, upscales, deploys and validates a number of different technologies and operational blueprints with a view to develop a new approach to safeguard existing and future European CEI operation over cyber-physical-social threats. Based on new protective concepts for life cycle assessment, resilience and self-healing "by design" and advanced intruder inspection and incident mitigation systems.

July 2017 – January 2020

Participation in the **NRG-5** research project in the framework of the European Union's Horizon 2020 (H2020–ICT-762013).

The NRG-5 project contributes to the 5G PPP/5G Initiative research and development activities and participation at the relevant 5G Working Groups by delivering a novel 5G-PPP compliant, decentralized, secure and resilient framework, with highly availability, able to homogeneously model and virtualize multi-homed, static or moving, hardware constrained (smart energy) devices, edge computing resources and elastic virtualized services over communications' and energy utilities' infrastructures.

July 2017 – February 2020

Participation in the **5GTANGO** research project in the framework of the European Union's Horizon 2020 (H2020-ICT-2014-2).

The 5GTANGO project is a continuation of the SONATA program and its main innovation is the development of a system (Verification and Validation) that will enable network services to be tested and certified before being deployed in a fifth-generation mobile communications environment.

February 2016 – January 2018

Participation in the **ARMOR** (**Large-Scale Experiments of IoT Security and Trust**) research project under the European Union's Horizon 2020 program (H2020-ICT-688237).

The objective of the **ARMOUR** research project is to explore the possibilities and perform large-scale experimentation in six different research scenarios to create a pan-European framework for European certification and benchmarking processes in networks and large-scale FIRE wireless sensor applications.

July 2015 – February 2018

Participation in the research project **SONATA** (**Service Programming and Orchestration for Virtualized Software Networks**), within the framework of European Union's Horizon 2020 (H2020-ICT-2014-2).

The SONATA research project implements an extensible deployment model (DevOps) approach for Network Function Virtualization services implemented in an innovative SDK deployment

toolkit and service platform capable of supporting the requirements of the fifth-generation mobile services and applications.

April 2013 - April 2015

Participation in the **XIFI** (**eXperimental Infrastructures for the Future Internet**) research project under the European Union's Framework Program 7 (FP7-ICT-604590).
The project is part of a research effort to establish a common Pan-European platform for future Internet-based large-scale trials, through the creation of sustainable federation of relevant infrastructures.

September 2011 – January 2015

Participation in the **REVERIE** (**REal and Virtual Engagement in Realistic Immersive Environments** research project under the European Union's Framework Program 7 (FP7- ICT-287723).
The REVERIE project focuses on integrating state-of-the-art technologies related to data acquisition and processing of 3D visuals and audio enabling physical and virtual world interaction based on innovative content-centric networking technologies.

September 2010 – February 2013

Participation in the **VITRO** (**Virtualized dIstributed plaTfoRms of smart Objects**) research project under the European Union's Framework Program 7 (FP7-EU-117645).
The project focuses on the development of architectures, algorithms and methods that will enable the implementation of customizable, scalable and secure Virtual Sensor Network platforms.

January 2008 – April 2010

Participation in the research project **AWISSENET** (**Ad-hoc PAN & WIreless Sensor SEcure NETwork**) under the European Union's Framework Program 7 (FP7-EU-211998).
The project concerns the security of wireless sensor networks and more specifically the development of innovative network protocols, capable of providing self-configuration and secure (secure) data and service transfer capabilities.

6. Reviewer of Scientific Journals and Conferences

Reviewer of the following scientific journals:

- Communications Magazine, **IEEE**
- Wireless Personal Communications, **Springer**
- Wireless Networks, **Springer**
- Wireless Communications and Mobile computing, **Wiley**
- Computer Networks, **Elsevier**
- Computer Communications, **Elsevier**
- Transactions on EMC, **IEEE**
- Journal of Electromagnetic Waves and Applications, **Taylor & Francis**
- Electronics Letters, **IEE**
- Sensors, **MDPI**

- Journal of Sensor Networks, **MDPI**
- Access, **IEEE**

Evaluator in several R&D FP7 and H2020 calls as well as national calls and open calls. In 2020, he has been appointed by the **Science Fund of the Republic of Serbia** to act as an evaluator for proposals dedicated to the specific Artificial Intelligence call. He has also been selected and appointed as evaluator in several Horizon2020 open calls (KITT4SME, etc)

7. Certifications – Training

T1. Certificate of Participation – Training Workshop on Mobile forensics, memory forensics, artifact analysis, European Union Agency for Network and Information Security (ENISA), 1-4 September 2015.
T2. **Python** programming language training, Institute of Training, EKDDA, 4 of April to 5 of June 2015.
T3. Using Oracle, Institute of Training, EKDDA, March 9-13, 2015
T4. **Training for Heads of Departments**, Institute of Training, EKDDA, 24 of November to 19 of December 2014.
T5. Training in **CISCO B** Technologies, Institute of Training, EKDDA, 5 of February to 19 of December 2014
T6. Training in **CISCO A** Technologies, Institute of Training, EKDDA, 12 of September to 12 of December 2013.
T7. Lawful Interception **Operation System User Training**, Nokia Siemens Networks, 20-21 July 2011.
T8. Certificate of Attendance – **Exercises on CIIP**, European Union Agency for Network and Information Security (**ENISA**), 16 May 2011.
T9. Online Call Monitoring for Mobile Switched Core Networks, Nokia Siemens Networks, 16-17 September 2010.
T10. Information Security Management Systems **(ISMS) Auditor / Lead Auditor** Training Course (**ISO 27001:2005**), TUV Hellas, 17-21 March 2008.

8. Technical Skills

Operating Systems	Mac OS, Linux, Windows
Databases	MySQL, PostgreSQL, MongoDB, InfluxDB, LevelDB
Cloud Technologies	OpenStack, VMWare, LXC, Docker, OpenDayLight
Web/App Servers	Apache, Tomcat, Tornado, NGINX
Programming Languages	Java, C++, nesC, Python
Scripting Languages	Perl, JavaScript, bash
Embedded Operating Systems	ContikiOS, RiotOS, TinyOS
Simulators	ns2/ns3, Cooja, ATDI/ICS, MatLab
Performance Monitoring Tools	Prometheus, Nagios
Web Tools	PHP, XML, AngularJS, HTML, Joomla, Django

9. Publications

According to Google Scholar on the 15 of November 2022, the publications are accompanied by the following indicators: **h-index** = **26**, **i10-index** = **50**, **Citations** = **2123**.

10.1. Publications in Scientific Peer Reviewed Journals

J1. Nikolaos Nomikos, Panagiotis K Gkonis, Petros S Bithas, **Panagiotis Trakadas, "A Survey on UAV-Aided Maritime Communications: Deployment Considerations, Applications, and Future Challenges"**, arXiv preprint arXiv:2209.09605, 2022

J2. Michael Tsatsaronis, Theodore Syriopoulos, Dimitris Gavalas, Georgia Boura, **Panagiotis Trakadas**, Martha Gkorila, **"The impact of Corporate Social Responsibility on corporate financial performance: an empirical study on shipping"**, Maritime Policy & Management, pp. 1-14, 2022

J3. Panagiotis A Karkazis, Konstantinos Railis, Stelios Prekas, **Panagiotis Trakadas**, Helen C Leligou, **"Intelligent Network Service Optimization in the Context of 5G/NFV"**, Signals, vol. 9, issue 3, pp. 587-610, 2022

J4. Spyros Lavdas, Panagiotis K Gkonis, Zinon Zinonos, **Panagiotis Trakadas**, Lambros Sarakis, Konstantinos Papadopoulos, **"A Machine Learning Adaptive Beamforming Framework for 5G Millimeter Wave Massive MIMO Multicellular Networks"**, IEEE Access, vol. 10, pp. 97597-91609, 2022

J5. Anastasios Giannopoulos, Sotirios Spantideas, Nikolaos Kapsalis, Panagiotis Gkonis, Lambros Sarakis, Christos Capsalis, Massimo Vecchio, **Panagiotis Trakadas, "Supporting Intelligence in Disaggregated Open Radio Access Networks: Architectural Principles, AI/ML Workflow and Use Cases"**, IEEE Access, 2022/4/11

J6. Sotirios T Spantideas, Anastasios E Giannopoulos, Nikolaos C Kapsalis, Angelos Angelopoulos, Stamatis Voliotis, **Panagiotis Trakadas, "Towards Zero-Defect Manufacturing: Machine Selection through Unsupervised Learning in the Printing Industry"**, Proceedings http://ceur-ws. org ISSN, vol. 1613, pp. 0073, 2022

J7. Stelios Prekas, Panagiotis Karkazis, Vasileios Nikolakakis, **Panagiotis Trakadas**, **"Comprehensive Comparison of VNE Solutions Based on Different Coordination Approaches"**, Telecom, vol. 2, issue 4, pp. 390-412, 2021

J8. Anastasios Giannopoulos, Sotirios Spantideas, Nikolaos Kapsalis, Panagiotis Karkazis, **Panagiotis Trakadas**, **"Deep reinforcement learning for energy-efficient multi-channel transmissions in 5G cognitive hetnets: Centralized, decentralized and transfer learning based solutions"**, IEEE Access, vol. 9, pp. 129358-129374, 2021

J9. Spyros Lavdas, Panagiotis K Gkonis, Zinon Zinonos, **Panagiotis Trakadas**, Lambros Sarakis, **"An Adaptive Hybrid Beamforming Approach for 5G-MIMO mmWave Wireless Cellular Networks"**, IEEE Access, vol. 9, pp. 127767-127778

J10. Anastasios Giannopoulos, Sotirios Spantideas, Nikolaos Kapsalis, Panagiotis Karkazis, **Panagiotis Trakadas**, **"Deep reinforcement learning for energy-efficient multi-channel transmissions in 5G cognitive hetnets: Centralized, decentralized and transfer learning based solutions"**, IEEE Access, vol. 9, pp. 129358-129374.

J11. Xavi Masip-Bruin, Eva Marín-Tordera, José Ruiz, Admela Jukan, **Panagiotis Trakadas**, Ales

Cernivec, Antonio Lioy, Diego López, Henrique Santos, Antonis Gonos, Ana Silva, José Soriano, Grigorios Kalogiannis, **"Cybersecurity in ICT Supply Chains: Key Challenges and a Relevant Architecture"**, Sensors, vol. 21, issue 18, 2021.

J12. **Panagiotis Trakadas**, Lambros Sarakis, Anastasios Giannopoulos, Sotirios Spantideas, Nikolaos Capsalis, Panagiotis Gkonis, Panagiotis Karkazis, Giovanni Rigazzi, Angelos Antonopoulos, Marta Amor Cambeiro, Sergio Gonzalez-Diaz, Luís Conceição, **"A cost-efficient 5G non-public network architectural approach: Key concepts and enablers, building blocks and potential use cases"**, Sensors, vol. 21, issue 16, 2021

J13. Alexandros Kaloxylos, Anastasius Gavras, D Camps Mur, Mir Ghoraishi, Halid Hrasnica, "AI and ML–Enablers for Beyond 5G Networks", Tech. Rep, 2020

J14. Nikolaos Nomikos, Emmanouel T Michailidis, **Panagiotis Trakadas**, Demosthenes Vouyioukas, Holger Karl, Josep Martrat, Theodore Zahariadis, Konstantinos Papadopoulos, Stamatis Voliotis, **"A UAV-based moving 5G RAN for massive connectivity of mobile users and IoT devices"**, Vehicular Communications, 2020/10/1

J15. Panagiotis K Gkonis, **Panagiotis T Trakadas**, Lambros E Sarakis, "**Non-Orthogonal Multiple Access in Multiuser MIMO Configurations via Code Reuse and Principal Component Analysis**", Electronics, MDPI, vol. 9, issue 8, 2020.

J16. **Panagiotis Trakadas**, et al., "**An artificial intelligence-based collaboration approach in industrial IoT manufacturing: Key concepts, architectural extensions and potential applications**", Sensors, MDPI, vol. 20, issue 19, 2020.

J17. Nikolaos Nomikos, Emmanouel T Michailidis, Panagiotis Trakadas, Demosthenes Vouyioukas, Holger Karl, Josep Martrat, Theodore Zahariadis, Konstantinos Papadopoulos, Stamatis Voliotis, "***A UAV-based moving 5G RAN for massive connectivity of mobile users and IoT devices***", Vehicular Communications, vol. 2, issue 29, Elsevier, 2020.

J18. Panagiotis K Gkonis, Panagiotis T Trakadas, Dimitra I Kaklamani, "***A Comprehensive Study on Simulation Techniques for 5G Networks: State of the Art Results, Analysis, and Future Challenges***", Electronics, vol. 9, issue 3, 2020.

J19. Konstantina Fotiadou, Terpsichori-Helen Velivassaki, Artemis Voulkidis, Konstantinos Railis, **Panagiotis Trakadas**, Theodore Zahariadis, "***Incidents Information Sharing Platform for Distributed Attack Detection***", IEEE Open Journal of the Communications Society, vol. 1, pp. 593-605, 2020.

J20. **P. Trakadas**, P. Karkazis, HC Leligou, Th. Zahariadis, F. Vicens, A. Zurita, P. Alemany, T. Soenen, C. Parada, J. Bonnet, E. Fotopoulou, A. Zafeiropoulos, E. Kapassa, M. Touloupou, D. Kyriazis, "***Comparison of Management and Orchestration Solutions for the 5G Era***", Journal of Sensor and Actuator Networks, vol. 9, issue 1, 2020.

J21. Th. Skouras, PK Gkonis, CN Ilias, **PT Trakadas**, EG Tsampasis, Th. V Zahariadis, "***Electrical Vehicles: Current State of the Art, Future Challenges, and Perspectives***", Clean Technologies, vol. 2, issue 1, 2020.

J22. A. Angelopoulos, ET Michailidis, N. Nomikos, **P. Trakadas**, A. Hatziefremidis, S. Voliotis, Th. Zahariadis, "***Tackling Faults in the Industry 4.0 Era—A Survey of Machine-Learning Solutions and Key Aspects***", Sensors, vol. 20, issue 1, 2020.

J23. N. Nomikos, **P. Trakadas**, A. Hatziefremidis, S. Voliotis, "***Full-Duplex NOMA Transmission***

with Single-Antenna Buffer-Aided Relays", Electronics, vol. 8, issue 12, 2019.

J24. N. Vretos, P. Daras, S. Asteriadis, E. Hortal, E. Ghaleb, E. Spyrou, HC Leligou, P. Karkazis, **P. Trakadas**, K. Assimakopoulos, "***Exploiting sensing devices availability in AR/VR deployments to foster engagement***", Virtual Reality, vol. 23, issue 4, pp. 399-410, 2019.

J25. ET Michailidis, N. Nomikos, **P. Trakadas**, AG Kanatas, "***Three-Dimensional Modeling of mmWave Doubly Massive MIMO Aerial Fading Channels***", IEEE Transactions on Vehicular Technology, 2019.

J26. N. Nomikos, ET Michailidis, **P. Trakadas**, D. Vouyioukas, Th. Zahariadis, I. Krikidis, "***Flex-NOMA: exploiting buffer-aided relay selection for massive connectivity in the 5G uplink***", IEEE Access, volume 7, pp. 88743-88755, 2019.

J27. M. Peuster, S. Schneider, M. Zhao, G. Xilouris, **P. Trakadas**, F. Vicens, W. Tavernier, T. Soenen, R. Vilalta, G. Andreou, D. Kyriazis, H. Karl, "***Introducing Automated Verification and Validation for Virtualized Network Functions and Services***", IEEE Communications Magazine, vol. 57, issue 5, pp. 96-102, 2019.

J28. F. Alvarez, D. Breitgand, D. Griffin, P. Andriani, S. Rizou, N. Zioulis, F. Moscatelli, J. Serrano, M. Keltsch, **P. Trakadas**, T Khoa Phan, A. Weit, U. Acar, O. Prieto, F. Iadanza, G. Carrozzo, H. Koumaras, D. Zarpalas, D. Jimenez, "***An edge-to-cloud virtualized multimedia service platform for 5G networks***", IEEE Transactions on Broadcasting, vol. 65, issue 2, pp. 369-380, 2019.

J29. **P. Trakadas**, N. Nomikos, ET Michailidis, Th. Zahariadis, FM Facca, D. Breitgand, S. Rizou, X. Masip, P. Gkonis, "***Hybrid clouds for data-Intensive, 5G-Enabled IoT applications: an overview, key issues and relevant architecture***", Sensors, vol. 19, issue 16, 2019.

J30. E. Tsampasis, P. Gkonis, **P. Trakadas**, Th. Zahariadis, "On the Performance Evaluation of a MIMO–WCDMA Transmission Architecture for Building Management Systems", Sensors, vol. 18, issue 1, 2018 **(citations: 1)**

J31. P. Karkazis, **P. Trakadas**, Th. Zahariadis, I. Chatzigiannakis, M. Dohler, A. Vitaletti, A. Antoniou, H. C. Leligou, L. Sarakis, "***Resource and Service Virtualisation in M2M and IoT Platforms***", International Journal of Intelligent Engineering Informatics, Inderscience Publishers, Vol. 3, 2015, pp. 205-224.

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