



Vasileios Tsoukas

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● WORK EXPERIENCE

15/06/2023 – CURRENT Athens, Greece

ICT CONSULTANT DEXTERA CONSULTING

- Consultant and Head of Development for the Business Intelligence System of The Greek National Telemedicine Network
- KPI Analyst
- Implementation Study
- Interoperability Study
- Data Warehouse, PostgreSQL, PgAdmin
- Dashboards

11/10/2019 – CURRENT Lamia, Greece

UNIVERSITY RESEARCH ASSISTANT INTELLIGENT SYSTEMS LABORATORY, DEPT OF CS AND BIOMEDICAL INFORMATICS, UNIVERSITY OF THESSALY

- Research
- Development
- Teaching
- Tiny Machine Learning
- Constrained Hardware

20/10/2023 – CURRENT Lamia, Greece

FOUNDER AETHER INFORMATICS

- Research and Development

Lamia, Greece

IT DEPARTMENT NEXANS HELLAS A.B.E

- Cable Builder software administration in the Studies Department
- IT and participation in the planning department of the company

● EDUCATION AND TRAINING

Sparta, Greece

BACHELOR OF SCIENCE - INFORMATION TECHNOLOGY AND TELECOMMUNICATIONS University of Peloponnese

Website <https://ds.uop.gr/en>

Lamia, Greece

MASTER OF SCIENCE - INFORMATICS AND COMPUTATIONAL BIOMEDICINE, COMPUTER AND TELECOMMUNICATION SYSTEMS SECURITY, BIG DATA MANAGEMENT, AND SIMULATION University of Thessaly

Website <http://icb.sci.uth.gr/?lang=en>

Website <https://dib.uth.gr/?lang=en>

● LANGUAGE SKILLS

Mother tongue(s): **GREEK**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	B2	B2	B2	B2	B2

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

● DIGITAL SKILLS

Visual Analytics Tools: Tableau, PowerBI | Visual Studio Code | Python | Git | PostgreSQL | Machine Learning | Microsoft Office | Latex | HTML | CSS | PyCharm | PgAdmin

● PROJECTS

CURRENT

National Telemedicine Network (EDIT) with the code of the OPS TA 5158648 of the Recovery & Resilience Fund - Section 1

The project "National Telemedicine Network (EDIT)" is co-financed by Greece and the European Union (Recovery and Resilience Fund - Greece 2.0)

Development of the Central System of the Greek National Telemedicine Network. Data warehouse creation and supervising the Business Intelligence System.

2019 – 2023

Intelligent distribution routing system in urban environments Smart Delivery

Co-financed by the European Regional Development Fund of the European Union and Greek national funds through the Operational Program Competitiveness, Entrepreneurship, and Innovation, under the call Research – Create – Innovate.

Development of a platform for intelligent routing using machine learning and routing algorithms, development of a management page and online stores to investigate cases, and finally, page development for analytics.

2020 – 2023

Supply chain and process monitoring production of food products using the blockchain technology

Platform development and utilization of technology blockchain, web platform development and creation of devices to detect malicious operations with Tiny Machine Learning technology.

2021

i2i: HEI – Idea to impact

i2i connects five higher education institutions (HEIs), three intermediary organisations, and eight associated partners in five entrepreneurial ecosystems. The overall vision and ambition of the i2i consortium is to address its capacity and capability to foster entrepreneurial thinking, actions, and institutions. The project also aims to develop entrepreneurship capital and aptitude for driving innovation, building on the strengths and weaknesses of each partner identified through the HEInnovate self-assessment. Funded by the European Union Development of an online platform for sharing partners' files

2024

Par-ICT_CENG

Enhancing ICT research infrastructure in Central Greece to enable processing of Big data from sensor stream, multimedia content, and complex mathematical modeling and simulations" (MIS 5047244) which is implemented under the Action "Reinforcement of the Research and Innovation Infrastructure", funded by the Operational Programme "Competitiveness, Entrepreneurship and Innovation" (NSRF 2014-2020) and co-financed by Greece and the European Union (European Regional Development Fund)

● PUBLICATIONS

2024

Assessing Greek National Telemedicine Network

Haralampos Karanikas, Vasileios Tsoukas, Dimitrios Drakopoulos, George Koukoulas, Angeliki Katsapi, Fotios Rizos. Accepted and Presented. Pending publication.

2024

[A Review on the emerging technology of TinyML](#)

Vasileios Tsoukas, Anargyros Gkogkidis, Eleni Boumpa, and Athanasios Kakarountas. 2024. A Review on the emerging technology of TinyML. ACM Comput. Surv. (April 2024). <https://doi.org/10.1145/3661820>

2024

[A Reward Modulated Spiked Timing Depended Plasticity inspired algorithm applied on a MultiLayer Perceptron](#)

Georgios Giannakas, Maria Sapounaki, Vasileios Tsoukas, and Athanasios Kakarountas. 2024. A Reward Modulated Spiked Timing Depended Plasticity inspired algorithm applied on a MultiLayer Perceptron. In Proceedings of the 27th Pan-Hellenic Conference on Progress in Computing and Informatics (PCI '23), February 14, 2024. Association for Computing Machinery, New York, NY, USA, 42–47. <https://doi.org/10.1145/3635059.3635066>

2023

[Internet of Things challenges and the emerging technology of TinyML](#)

Vasileios Tsoukas, Anargyros Gkogkidis, and Athanasios Kakarountas. 2023. Internet of Things Challenges and the Emerging Technology of TinyML. In 2023 19th International Conference on Distributed Computing in Smart Systems and the Internet of Things (DCOSS-IoT), June 2023. 491–495. <https://doi.org/10.1109/DCOSS-IoT58021.2023.00082>

2023

[Development of a Dynamically Adaptable Routing System for Data Analytics Insights in Logistic Services](#)

Vasileios Tsoukas, Eleni Boumpa, Vasileios Chioktour, Maria Kalafati, Georgios Spathoulas, and Athanasios Kakarountas. 2023. Development of a Dynamically Adaptable Routing System for Data Analytics Insights in Logistic Services. Analytics 2, 2 (June 2023), 328–345. <https://doi.org/10.3390/analytics2020018>

2023

[A Gas Leakage Detection Device Based on the Technology of TinyML](#)

Vasileios Tsoukas, Anargyros Gkogkidis, Eleni Boumpa, Stefanos Papafotikas, and Athanasios Kakarountas. 2023. A Gas Leakage Detection Device Based on the Technology of TinyML †. Technologies 11, 2 (April 2023), 45. <https://doi.org/10.3390/technologies11020045>

2023

[Porting the Paillier Algorithm for Homomorphic Encryption on Portable Devices](#)

Angeliki Karageorgopoulou, Vasileios Tsoukas, Georgios Spathoulas, Athanasios Kakarountas, and Maria Koziri. 2023. Porting the Paillier Algorithm for Homomorphic Encryption on Portable Devices. In 2023 IEEE International Conference on Consumer Electronics (ICCE), January 2023. 1–5. <https://doi.org/10.1109/ICCE56470.2023.10043586>

2022

A Review of the vehicle routing problem and the current routing services in smart cities

Eleni Boumpa, Vasileios Tsoukas, Vasileios Chioktour, Maria Kalafati, Georgios Spathoulas, Athanasios Kakarountas, Panagiotis Trivellas, Panagiotis Reklitis, and George Malindretos. 2022. A Review of the Vehicle Routing Problem and the Current Routing Services in Smart Cities. *Analytics 2*, (December 2022), 1–16. <https://doi.org/10.3390/analytics2010001>

2022

A TinyML-based System For Smart Agriculture

Vasileios Tsoukas, Anargyros Gkogkidis, and Athanasios Kakarountas. 2023. A TinyML-based System For Smart Agriculture. In *Proceedings of the 26th Pan-Hellenic Conference on Informatics (PCI '22)*, March 29, 2023. Association for Computing Machinery, New York, NY, USA, 207–212. <https://doi.org/10.1145/3575879.3575994>

2022

Smart Delivery for Goods Exploiting ML Algorithms

Eleni Boumpa, Vasileios Tsoukas, Vasileios Chioktour, Maria Kalafati, Georgios Spathoulas, and Athanasios Kakarountas. 2023. Smart Delivery for Goods Exploiting ML Algorithms. In *Proceedings of the 26th Pan-Hellenic Conference on Informatics (PCI '22)*, March 29, 2023. Association for Computing Machinery, New York, NY, USA, 304–308. <https://doi.org/10.1145/3575879.3576009>

2022

A TinyML-based Alcohol Impairment Detection System For Vehicle Accident Prevention

Anargyros Gkogkidis, Vasileios Tsoukas, and Athanasios Kakarountas. 2022. A TinyML-based Alcohol Impairment Detection System For Vehicle Accident Prevention. In *2022 7th South-East Europe Design Automation, Computer Engineering, Computer Networks and Social Media Conference (SEEDA-CECNSM)*, September 2022. 1–6. <https://doi.org/10.1109/SEEDA-CECNSM57760.2022.9932962>

2022

An extended instruction set for bioinformatics' multiple sequence alignment

Anargyros Gkogkidis, Vasileios Tsoukas, and Athanasios Kakarountas. 2022. An Extended Instruction Set for Bioinformatics' Multiple Sequence Alignment. *Electronics 11*, 16 (January 2022), 2550. <https://doi.org/10.3390/electronics11162550>

2022

A TinyML-based system for gas leakage detection

Anargyros Gkogkidis, Vasileios Tsoukas, Stefanos Papafotikas, Eleni Boumpa, and Athanasios Kakarountas. 2022. A TinyML-based system for gas leakage detection. In *2022 11th International Conference on Modern Circuits and Systems Technologies (MOCAST)*, June 2022. 1–5. <https://doi.org/10.1109/MOCAST54814.2022.9837510>

2022

Elements of TinyML on Constrained Resource Hardware

Vasileios Tsoukas, Anargyros Gkogkidis, and Athanasios Kakarountas. 2022. Elements of TinyML on Constrained Resource Hardware. In *Advances in Computing and Data Sciences*, 2022. Springer International Publishing, Cham, 316–331.

2022

Enhancing food supply chain security through the use of blockchain and TinyML

Vasileios Tsoukas, Anargyros Gkogkidis, Aikaterini Kampa, Georgios Spathoulas, and Athanasios Kakarountas. 2022. Enhancing Food Supply Chain Security through the Use of Blockchain and TinyML. *Information 13*, 5 (May 2022), 213. <https://doi.org/10.3390/info13050213>

2022

Security and Privacy Concerns for Healthcare Wearable Devices and Emerging Alternative Approaches

Eleni Boumpa, Vasileios Tsoukas, Anargyros Gkogkidis, Georgios Spathoulas, and Athanasios Kakarountas. 2022. Security and Privacy Concerns for Healthcare Wearable Devices and Emerging Alternative Approaches. In Wireless Mobile Communication and Healthcare (Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering), 2022. Springer International Publishing, Cham, 19–38. https://doi.org/10.1007/978-3-031-06368-8_2

2021

A Review of Machine Learning and TinyML in Healthcare

Vasileios Tsoukas, Eleni Boumpa, Georgios Giannakas, and Athanasios Kakarountas. 2021. A Review of Machine Learning and TinyML in Healthcare. In 25th Pan-Hellenic Conference on Informatics (PCI 2021), November 26, 2021. Association for Computing Machinery, New York, NY, USA, 69–73. <https://doi.org/10.1145/3503823.3503836>

2021

Blockchain technology in food supply chain: A state of the art

Vasileios Tsoukas, Anargyros Gkogkidis, Aikaterini Kampa, Georgios Spathoulas, and Athanasios Kakarountas. 2021. Blockchain technology in food supply chain: A state of the art. In 2021 6th South-East Europe Design Automation, Computer Engineering, Computer Networks and Social Media Conference (SEEDA-CECNSM), September 2021. 1–8. <https://doi.org/10.1109/SEEDA-CECNSM53056.2021.9566256>

2020

A Survey on Mobile User Perceptions of Sensitive Data and Authentication Methods

Vasileios Tsoukas, Anargyros Gkogkidis, and Athanasios Kakarountas. 2020. A Survey on Mobile User Perceptions of Sensitive Data and Authentication Methods. In 24th Pan-Hellenic Conference on Informatics (PCI 2020), November 20, 2020. Association for Computing Machinery, New York, NY, USA, 346–349. <https://doi.org/10.1145/3437120.3437337>

2019

Multi-screen lock: visual passwords from user's social data

Vasileios Tsoukas, Athanasios Kakarountas, Anargyros Gkogkidis, and Georgios Giannakas. 2019. Multi-screen lock: visual passwords from user's social data. In Proceedings of the 23rd Pan-Hellenic Conference on Informatics (PCI '19), November 28, 2019. Association for Computing Machinery, New York, NY, USA, 90–95. <https://doi.org/10.1145/3368640.3368657>

2019

A Comparative Assessment of Machine Learning Algorithms for Events Detection

Vasileios Tsoukas, Konstantinos Kolomvatsos, Vasileios Chioktour, and Athanasios Kakarountas. 2019. A Comparative Assessment of Machine Learning Algorithms for Events Detection. In 2019 4th South-East Europe Design Automation, Computer Engineering, Computer Networks and Social Media Conference (SEEDA-CECNSM), September 2019. 1–4. <https://doi.org/10.1109/SEEDA-CECNSM.2019.8908366>

● **VOLUNTEERING**

CURRENT

Fosscomm

- Communications Manager
- Developer
- Website
- Mobile App

CURRENT Lamia

TEDxLamia

- Web Development
- Site Administration