

KONSTANTINOS KARAMPIDIS

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[Google Scholar](#)

EDUCATION

- Postdoctoral Researcher,** July 2020 – November 2021
University of the Aegean, Department of Information & Communication Systems Engineering
- PhD** University of the Aegean, Department of Information & Communication Systems Engineering June 2020
Dissertation: “Image Steganalysis for Digital Forensics”
Committee: Ergina Kavallieratou (chair), Efstathios Stamatatos, Giorgos Papadourakis, Stefanos Gritzalis, Spyros Kokolakis, Maria Karyda, Vassilis Anastassopoulos
- MSc** TEI of Crete, Department of Informatics & Multimedia November 2015
Thesis: “File Type Identification - A Computational Intelligence Approach to Digital Forensics”
Tutor: Prof. Giorgos Papadourakis
- BEng** TEI of Crete, Department of Electrical Engineering July 1994

SCHOLARSHIPS

- Scholarship** 2020
Scholarship under the program "EDBM103 - Support for researchers with emphasis on young researchers - Cycle B" -issued by the Ministry of Development and Investments-with the research proposal "Creation of a Multimodal Biometric Password by using Steganography"
- Scholarship** 1989
State Scholarships Foundation (IKY) for the 3rd place on admission to the department
- Scholarship** 1990
State Scholarships Foundation (IKY) for my academic performance

TEACHING EXPERIENCE

Hellenic Mediterranean University, Crete December 2020 - today
Laboratory teaching staff (EDIP), Department of Electrical & Computer Engineering
Discipline: “Computational Intelligence applied to Digital Forensics”

I teach the following courses / labs.

BEng courses

- “***Pattern Recognition Theory - Laboratory***”, an undergraduate course averaging 80 students per semester.
This course provides an introduction to the fundamentals of statistical pattern recognition with examples from various application areas. Emphasis is placed on feature extraction, linear classifiers, clustering applications and methodologies, and Bayesian decision theory.
- “***Artificial Neural Networks Laboratory***”, an undergraduate course averaging 80 students per semester. The course introduces the theory and practice of neural computation. It provides the principles of neurocomputing with artificial neural networks widely used for addressing real-world problems such as classification, regression, system identification, pattern recognition, data mining, time-series prediction, etc. Moreover, Deep Learning models (Autoencoders, CNN, GAN, LSTM etc.) are explained and presented. The students have the chance to implement and experiment with several of these models on practical problems.
- “***Digital Signal Processing Laboratory***”, an undergraduate course averaging 200 students per semester.
This course provides an introduction to Digital Signal Processing (DSP). It begins with an explanation of the need for digital signal processing and DSP systems followed by consideration of convolution, time invariance, and stability for discrete-time systems. The Fourier transform of discrete signals is also considered, followed by the Discrete Fourier transform and the use of the Z transform. Finally, the design of FIR and IIR filters and the fast Fourier transform (FFT) is explained.
- “***Digital Image Processing Laboratory***”, an undergraduate course averaging 200 students per semester.
This course provides an introduction to Digital Image Processing (DIP). It begins with an explanation of the need of DIP in the spatial/frequency domain, describing common processing techniques (Connectivity, Regions, and Boundaries, Filtering Fourier Transform, Convolution with FFT, Image quality improvement with noise removal etc.).
- “***Introduction to Computer Science – Laboratory***”, of the Department of Business Administration and Tourism, an undergraduate course designed to improve the level of knowledge and skills of users in computers.

My teaching duties also include:

- ✓ Develop and grade tests, exams and homework.
- ✓ Revise the syllabus to meet accreditation standards.
- ✓ Coordinate one to three assistants (number of assistants varies depending to the number of enrolled students).

MSc courses (MSc in Informatics & Multimedia)

- “***Computational Intelligence***”, a postgraduate course averaging 10 students per semester.
Computational Intelligence (CI) is a methodology involving computing that exhibits an ability to learn and/or to deal with new situations, such that the system is perceived to possess one or more attributes of reason, such as generalization, discovery, association and abstraction. Silicon-based computational intelligence systems usually comprise hybrids of paradigms such as artificial neural networks, fuzzy systems, and evolutionary algorithms, augmented with knowledge elements,

and are often designed to mimic one or more aspects of carbon-based biological intelligence. The concepts, paradigms, algorithms, and implementation of CI and its constituent methodologies – evolutionary computation, neural networks and fuzzy logic – are the focus of this course. In addition, there is an emphasis on practical applications throughout, that is, how to apply the concepts, paradigms, algorithms, and implementations discussed to practical problems in engineering and computer science.

Supervisor in master’s thesis

“Liver Tumor Segmentation using Deep Learning.”

Member of master’s thesis examining committee

- “A Toolset for Physical Interaction in Augmented Reality Environments”
- “Cyber-range platform for Industry 4.0 training on cybersecurity”

Supervisor of BEng thesis

- “A survey on Auto Machine Learning Methods”
- “Stock market prediction with machine learning and neural network techniques”
- “Synthetic data generation for recyclable material categorisation using machine learning models”
- “Detection of Parkinson's disease using machine learning methods”
- “Creating a brain-computer interface using electroencephalography and machine learning techniques”
- “Synthetic image generation using generative adversarial networks”
- “Camera Relocalization from Video”
- “Neural Networks and Image Generation”
- “Cybersecurity – Exploiting the CTFd framework for the development of remote cybersecurity laboratories”
- “Supervised Learning with Deep Neural Networks”

BEng students examining committee

- “KLSTR Mobile Controller”
- “Creation of a Chatbot Helper for Retailers”

Hellenic Mediterranean University, Heraklion October 2019 to June 2020
Laboratory Teaching Assistant, Department of Electrical & Computer Engineering

- Taught “**Programming**”, an undergraduate course averaging 200 students per semester. Topics covered include data types, control structures, standard input/output, file input/output, mathematic library, problem-solving, functions, arrays, dynamic memory, and pointers.
- Taught “**Artificial Neural Networks Laboratory**”, an undergraduate course averaging 80 students per semester. The course introduces the theory and practice of neural computation. It provides the principles of neurocomputing with artificial neural networks widely used for addressing real-world problems such as classification, regression, system identification, pattern recognition, data mining, time-series prediction, etc. Moreover, Deep Learning models (Autoencoders, CNN,

GAN, LSTM etc.) are explained and presented. The students have the chance to implement and experiment with several of these models on practical problems.

- Taught “**Digital Signal Processing Laboratory**”, an undergraduate course averaging 200 students per semester. This course provides an introduction to Digital Signal Processing (DSP). It begins with an explanation of the need for digital signal processing and DSP systems followed by consideration of convolution, time invariance, and stability for discrete-time systems. The Fourier transform of discrete signals is also considered, followed by the Discrete Fourier transform and the use of the Z transform. Finally, the design of FIR and IIR filters and the fast Fourier transform (FFT) is explained.

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Technological Educational Institute of Crete, Heraklion September 2016 to June 2019
Laboratory Teaching Assistant, Department of Informatics Engineering

- Taught “**Pattern Recognition Laboratory**”, an undergraduate course averaging 80 students per semester. This course provides an introduction to the fundamentals of statistical pattern recognition with examples from various application areas. Emphasis is placed on feature extraction, linear classifiers, clustering applications and methodologies, and Bayesian decision theory.
- Taught “**Artificial Neural Networks Laboratory**”, an undergraduate course averaging 80 students per semester. The course introduces the theory and practice of neural computation. It provides the principles of neurocomputing with artificial neural networks widely used for addressing real-world problems such as classification, regression, system identification, pattern recognition, data mining, time-series prediction, etc. Moreover, Deep Learning models (Autoencoders, CNN, GAN, LSTM etc.) are explained and presented. The students have the chance to implement and experiment with several of these models on practical problems.
- Taught “**Digital Signal Processing Laboratory**”, an undergraduate course averaging 200 students per semester. This course provides an introduction to Digital Signal Processing (DSP). It begins with an explanation of the need for digital signal processing and DSP systems followed by consideration of convolution, time invariance, and stability for discrete-time systems. The Fourier transform of discrete signals is also considered, followed by the Discrete Fourier transform and the use of the Z transform. Finally, the design of FIR and IIR filters and the fast Fourier transform (FFT) is explained.

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- ✓ Develop and grade tests, exams and homework.
- ✓ Revise the syllabus to meet accreditation standards.

Technological Educational Institute of Crete, Heraklion March 2015 to June 2015
Laboratory Teaching Assistant, Department of Informatics Engineering

- Taught “**Digital Signal Processing Laboratory**”, an undergraduate course averaging 200 students per semester. This course provides an introduction to Digital

Signal Processing (DSP). It begins with an explanation of the need for digital signal processing and DSP systems followed by consideration of convolution, time invariance, and stability for discrete-time systems. The Fourier transform of discrete signals is also considered, followed by the Discrete Fourier transform and the use of the Z transform. Finally, the design of FIR and IIR filters and the fast Fourier transform (FFT) is explained.

My teaching duties also included:

- ✓ Develop and grade tests, exams and homework.
- ✓ Revise the syllabus to meet accreditation standards.

ΠΕΚ ΑΚΜΙ, Heraklion

February 2016 to June 2019

Instructor in Informatics

- Taught “*Computer Networks I & Computer Networks II*”, courses averaging 20 students per semester.

This course provides an introduction to computer networks, with a special focus on the Internet architecture and protocols. Topics include layered network architectures, addressing, naming, forwarding, routing, communication reliability, the client-server model, web and email protocols

- Taught “*Network Security*”, course averaging 20 students per semester. This course introduces students to the threats as well as defences for securing networks. Topics covered include network security, authentication, security protocol design and analysis, security modelling, trusted computing, key management, program safety, intrusion detection, DDoS detection and mitigation, architecture/operating systems security, security policy, web security, and other emerging topics.
- Taught “*Databases I & Databases II*”, courses averaging 30 students per semester. These courses provide an introduction to the principles underlying the design and implementation of relational databases and database management systems. Both courses cover in detail the main language for relational databases, SQL and the theoretical query languages on which SQL's core is based, namely relational algebra and relational calculus. Other important topics covered during the courses include normal forms, transaction processing, concurrency control, incomplete data and rudiments of query optimization.

My teaching duties also included to develop and grade, tests, exams and homework.

Secondary Education – Private Sector, Heraklion

September 1999 to June 2016

Teacher in Informatics

- Taught “*Application Development in Programming Environment*”. This course provides an introduction to programming and aims to enable students to develop analytical and synthetic thinking, to acquire methodological skills and to be able to solve simple related problems. It comprises of two parts and in the first part the emphasis is on the development of algorithmic problem solving skills. The second part is devoted to the implementation of programs in both high-level and object-oriented programming languages. The course is taught in the last class of high school and is examined in a national level for entering the university.
- Taught “*Computer Networks*”. This course is taught to the last class of the Vocational Lyceum. It provides an introduction to computer networking, describes the key concepts of architecture and

interconnection networks, the TCP/IP protocol (in detail), WAN and computer security. The course is examined in a national level for entering the university.

RESEARCH EXPERIENCE

Project Name	Duration
“Development of educational material and/or applications using intelligent methods and Arduino”	03/10/2023-29/02/2024

The project concerns the development of educational material for applications using intelligent methods and Arduino, so that they can be used in the educational process.

Project Name	Duration
“Sign Language Dictionary of Technical Terms for Education - TechWhiz» Erasmus+, Grant Agreement Number 021-1-PT01-KA220-HED-000027550	19/05/2023-29/02/2024

The project concerns the creation of an innovative infrastructure for the interpretation and learning of technical terms in sign language, as there is a lack of relevant meanings. My job in this project is to actively participate in a) creating a detailed course, b) creating a technical dictionary in sign language and c) entering the meanings of technical terms in Greek Sign Language into the VirtualSign database.

Project Name	Duration
“Digital Training for Cybersecurity Students in Industrial Fields» Erasmus+, Grant Agreement Number 2020-1-ES01-KA226-HE-095291	06/10/2022-31/03/2023

The project concerns the creation of an advanced cybersecurity course along with three remote labs for hands-on experience. My job in this project is to actively participate into the creation of the course modules and especially to module 3 –threats and attacks- and Module 4 which analyzes the digital forensic analysis to industrial networks.

Project Name	Duration
“Computer Assisted Teaching of Sign Language using Computer Vision and Machine Learning” - Erasmus+, Grant Agreement Number 2020-1-EL01-KA203-079232	30/05/2022 – 31/08/2023

The project concerns the development of an innovative and affordable system/service for interactive Sign Language teaching for students in Special Education/Pedagogical departments and primary school education. It is based on computer-vision, machine-learning, linguistic technology and avatars developed by all the involved. My job in this project is to establish, host and maintain a LMS through which the developed curricula and guides would be available to trainees. Moreover, I am involved to the development of a Moodle plugin which will capture trainees’ gestures, communicate with the remote server (which will do the processing) and show the final result to the trainee.

Project Name	Duration
“Advancing inclusive education through International Sign” - Erasmus+, Grant Agreement Number 2019-1-DE01-KA203-004964	22/11/2021 – 31/08/2022

The project aims to establish an innovative infrastructure to promote the communication between deaf and non-deaf as well as among international deaf students using International Sign, probably the simplest sign language to learn. The project transfers the results from the VirtualSign research project and extend it to support International Sign, a product called the IS-Automatic Translator, to develop applications to assist deaf students in educational settings and in daily life in an international environment. My job in this project is to actively participate in the creation of a detailed course (published as an ebook), maintain a LMS for Greek language and to import into the VirtualSign database the signs both in International Sign and Greek Sign Language.

Project Name	Duration
“Arduino SYS-STEM for Schools” - Erasmus+, Grant Agreement Number 2019-1-ES01-KA201-064454	24/02/2021 – 30/04/2022

The project aims to provide teachers of 14-18 old students with open access, quality, ready to use didactical materials in electronics and the digital technology with which to realize "hands-on" projects in Arduino via access to shared remote ArdLABs. The project developed a complete package of didactical materials in basic electronics using Arduino, including exercises and solutions and guidelines for delivery with different age and competence level learners. Moreover, four (4) remote project partner ArdLABs which can be reserved and connected to via the SYS-STEM ArdLAB hub - an online platform which coordinates and manages reservations and the remote connections- were developed. My job in this project was to actively develop a) the course and b) a remote lab for hands-on training, using Raspberry, Arduino and various sensors.

Project Name	Duration
“Utilization of Steganography to create strong passwords”	08/07/2020-04/11/2021

This was my postdoctoral research at AI Lab / Department of Information & Communication Systems Engineering of University of the Aegean. The main goal of the project was to propose a novel password scheme and to test the security of the proposed method against attacks.

Project Name	Duration
“Creation of a Multimodal Biometric Password by using Steganography”	12/06/2020 – 11/9/2021 12/09/21 – 05/02/2022*
Ministry of Development and Investments – Human Resources, Development, Education and Lifelong Learning	

In this project i have used steganography in conjunction with biometrics as a mean to implement a novel password. More specifically, the 68 facial points were utilized as a secret message embedded to an image. This image was then utilized as password. The security of the proposed method was tested against state-of-the-art Generative Adversarial Networks and it was proved that the proposed method is extremely secure against attacks.

*This period refers to an extension granted to the project (originally due to expire on 11/09/2021) without modifying the contract and the contract price.

Project Name	Duration
“Industrial Cyber Security 4.0” - Erasmus+, Grant Agreement Number 2018-1-ES01-KA203-050493)	05/02/2019 – 04/06/2020

The project concerns the creation of an integrated training course for high level technicians (EQF 5 and above) for operational workers. The course focuses on cyber threats, dangers and consequences in Industrial Systems and offers basic practical cyber security awareness training to prevent unnecessary exposure to risk and also basic capacity to protect against threats when detected. My job in this project was to report case studies from Greek SMEs, highlight the cyber threats and actively be involved into the development of the course.

Project Name	Duration
“International Assisted communication for Education I-ACE” - Erasmus+, Grant Agreement Number 2016-1-PT01-KA201-022812)	03/04/2018 - 31/12/2018

This project delivered an automatic translator between written speech and sign language to be used by students, teachers and staff in the school environment preventing in this way early school leaving. The Sign Language Translator was developed to learn the sign languages of the partners’ nationalities (Portuguese, German, British, Cypriot, Greek and Slovenian). My job in this project was to import into the translators’ database the gestures/signs from an extended vocabulary for the Greek Sign Language.

Project Name	Duration
“Blended Academic International Mobility - Blended-AIM” - Erasmus+, Grant Agreement Number 2015-1-PT01-KA203-013100)	03/04/2018 - 01/10/2018

The project concerns the cooperation of university students –situated in different European countries- in common projects. My job in this project is to coordinate my university’s students in order to promote and strengthen the collaboration with foreign universities.

Books

Gamal et. al. "Communication Challenges in Inclusive Education Faced by Deaf and Non-deaf People" In: Kompara, M., Hobl, M., Weltzer, T., University of Maribor University Press. <https://orcid.org/0000-0002-6865-4946>

Book Chapters

Karampidis, K., Deligiannis, I., Papadourakis, G. (2019). Combining Genetic Algorithms and Neural Networks for File Forgery Detection. In: Tsihrintzis, G., Sotiropoulos, D., Jain, L. (eds) Machine Learning Paradigms. Intelligent Systems Reference Library, vol 149 . Springer, Cham. https://doi.org/10.1007/978-3-319-94030-4_12.

Journal publications

Konstantinos Karampidis, Exploiting multimodal biometrics for enhancing password security, Logic Journal of the IGPL, 2024; jzae009, <https://doi.org/10.1093/jigpal/jzae009>

Lionakis E, Karampidis K, Papadourakis G. Current Trends, Challenges, and Future Research Directions of Hybrid and Deep Learning Techniques for Motor Imagery Brain–Computer Interface. *Multimodal Technologies and Interaction*. 2023; 7(10):95. <https://doi.org/10.3390/mti7100095>

Karampidis K, Rousouliotis M, Linardos E, Kavallieratou E. "A comprehensive survey of fingerprint presentation attack detection." *Journal Surveill Secur Saf* 2021;2:117-61. <http://dx.doi.org/10.20517/jsss.2021.07>

Karampidis, K., Kavallieratou, E. & Papadourakis, G. "A Dilated Convolutional Neural Network as Feature Selector for Spatial Image Steganalysis – A Hybrid Classification Scheme." *Pattern Recognit. Image Anal.* 30, 342–358 (2020). <https://doi.org/10.1134/S1054661820030098>

Konstantinos Karampidis, Ergina Kavallieratou, Giorgos Papadourakis, "A review of image steganalysis techniques for digital forensics", *Journal of Information Security and Applications*, Volume 40, 2018, Pages 217-235, ISSN 2214-2126, <https://doi.org/10.1016/j.jisa.2018.04.005>.

Karampidis, Konstantinos, Ergina Kavallieratou, and Giorgos Papadourakis. "Comparison of classification algorithms for file type detection a digital forensics perspective." *Polibits* 56 (2017): 15-20.

Karampidis, Konstantinos and Papadourakis, Giorgos (2017) "File Type Identification - Computational Intelligence for Digital Forensics," *Journal of Digital Forensics, Security and Law*: Vol. 12, Article 6. DOI: <https://doi.org/10.15394/jdfsl.2017.1472>.

Conference papers

(Peer-reviewed)

Kara M, Laouid A, Hammoudeh M, Karampidis K, Papadourakis G, Bounceur A. A Secure Multi-Agent-Based Decision Model Using a Consensus Mechanism for Intelligent Manufacturing Tasks. *Engineering Proceedings*. 2023; 56(1):234. <https://doi.org/10.3390/ASEC2023-15929>

M. Vasilakis, K. Karampidis, M. Tampouratzis, A. Malamos, S. Panagiotakis and N. Mastorakis, "Copyright Protection on Electronic Books: Study and Design of a New Approach," *2023 International Conference on Applied Mathematics & Computer Science (ICAMCS)*, Lefkada Island, Greece, 2023, pp. 144-149, doi: 10.1109/ICAMCS59110.2023.00030

B. Lauwers, K. Karampidis, M. Tampouratzis, M. Vasilakis, G. Papadourakis and N. Mastorakis, "A Comparative Study of Copy-Move Forgery Detection Techniques," *2023 International Conference on Applied Mathematics & Computer Science (ICAMCS)*, Lefkada Island, Greece, 2023, pp. 122-128, doi: 10.1109/ICAMCS59110.2023.00027

K. Karampidis, S. Panagiotakis, M. Vasilakis, A. T. Lamari, E. Markakis and G. Papadourakis, "Digital Training for Cybersecurity in Industrial Fields via virtual labs and Capture-The-Flag challenges," *2023 32nd Annual Conference of the European Association for Education in Electrical and Information Engineering (EAEEIE)*, Eindhoven, Netherlands, 2023, pp. 1-6, doi: 10.23919/EAEEIE55804.2023.10181644

M. Kara, K. Karampidis, G. Papadourakis, A. Laouid and M. AlShaikh, "A Probabilistic Public-Key Encryption with Ensuring Data Integrity in Cloud Computing," *2023 International Conference on Control, Artificial Intelligence, Robotics & Optimization (ICCAIRO)*, Crete, Greece, 2023, pp. 59-66, doi: 10.1109/ICCAIRO58903.2023.00017

Kara, M., Karampidis, K., Sayah, Z., Laouid, A., Papadourakis, G., Abid, M.N. (2023). A Password-Based Mutual Authentication Protocol via Zero-Knowledge Proof Solution. In: Zantout, H., Ragab Hassen, H. (eds) *Proceedings of the International Conference on Applied Cybersecurity (ACS) 2023*. ACS 2023. *Lecture Notes in Networks and Systems*, vol 760. Springer, Cham. https://doi.org/10.1007/978-3-031-40598-3_4

H. Geraedts, N. Bencheva, A. Albuquerque, K. Karampidis and G. Papadourakis, "A framework to enhance students' soft skills within the context of international engineering project collaboration," *2022 31st Annual Conference of the European Association for Education in Electrical and Information Engineering (EAEEIE)*, 2022, pp. 1-6, doi: 10.1109/EAEEIE54893.2022.9820308.

S. Panagiotakis et al., "Remote Arduino Labs for Teaching Microcontrollers and Internet of Things Programming," *2022 31st Annual Conference of the European Association for Education in Electrical and Information Engineering (EAEEIE)*, 2022, pp. 1-6, doi: 10.1109/EAEEIE54893.2022.9820308.

Association for Education in Electrical and Information Engineering (EAEEIE), 2022, pp. 1-6, doi: 10.1109/EAEEIE54893.2022.9820605.

Logothetis, I., Karampidis, K., Vidakis, N., Papadourakis, G. (2022). Hand Interaction Toolset for Augmented Reality Environments. In: De Paolis, L.T., Arpaia, P., Sacco, M. (eds) Extended Reality. XR Salento 2022. Lecture Notes in Computer Science, vol 13445. Springer, Cham. https://doi.org/10.1007/978-3-031-15546-8_17

Karampidis, K., Linardos, E., Kavallieratou, E. (2022). StegoPass – Utilization of Steganography to Produce a Novel Unbreakable Biometric Based Password Authentication Scheme. In: Gude Prego, J.J., de la Puerta, J.G., García Bringas, P., Quintián, H., Corchado, E. (eds) 14th International Conference on Computational Intelligence in Security for Information Systems and 12th International Conference on European Transnational Educational (CISIS 2021 and ICEUTE 2021). CISIS - ICEUTE 2021. Advances in Intelligent Systems and Computing, vol 1400. Springer, Cham. https://doi.org/10.1007/978-3-030-87872-6_15

K. Karampidis, A. Trigoni, G. Papadourakis, M. Christofaki and N. Escudeiro, "Removing education barriers for deaf students at the era of Covid-19," 2021 30th Annual Conference of the European Association for Education in Electrical and Information Engineering (EAEEIE), 2021, pp. 1-6, doi: 10.1109/EAEEIE50507.2021.9530920

Karampidis, K., Trigoni, A., Papadourakis, G., Christofaki, M., Escudeiro, N. (2021). Difficulties and Disparities to Distance Learning During Covid-19 Period for Deaf Students –A Proposed Method to Eradicate Inequalities. In: Cristea, A.I., Troussas, C. (eds) Intelligent Tutoring Systems. ITS 2021. Lecture Notes in Computer Science, vol 12677. Springer, Cham. https://doi.org/10.1007/978-3-030-80421-3_1

Ionescu, B. et al. (2019). ImageCLEF 2019: Multimedia Retrieval in Medicine, Lifelogging, Security and Nature. In: Experimental IR Meets Multilinguality, Multimodality, and Interaction. CLEF 2019. Lecture Notes in Computer Science, vol 11696. Springer, Cham. https://doi.org/10.1007/978-3-030-28577-7_28

K. Karampidis, S. Panagiotakis, M. Vasilakis, E. K. Markakis and G. Papadourakis, "Industrial CyberSecurity 4.0: Preparing the Operational Technicians for Industry 4.0," 2019 IEEE 24th International Workshop on Computer Aided Modeling and Design of Communication Links and Networks (CAMAD), Limassol, Cyprus, 2019, pp. 1-6, doi: 10.1109/CAMAD.2019.8858454

Ionescu, B. et al. (2019). ImageCLEF 2019: Multimedia Retrieval in Lifelogging, Medical, Nature, and Security Applications. In: Azzopardi, L., Stein, B., Fuhr, N., Mayr, P., Hauff, C., Hiemstra, D. (eds) Advances in Information Retrieval. ECIR 2019. Lecture Notes in Computer Science, vol 11438. Springer, Cham. https://doi.org/10.1007/978-3-030-15719-7_40

Karampidis, K., Papadourakis, G. (2016). File Type Identification for Digital Forensics. In: Krogstie, J., Mouratidis, H., Su, J. (eds) Advanced Information Systems Engineering Workshops. CAiSE 2016. Lecture Notes in Business Information Processing, vol 249. Springer, Cham. https://doi.org/10.1007/978-3-319-39564-7_25.

Konstantinos Karampidis, Nikos Vasillopoulos, Carlos Cuevas Rodriguez, Carlos Roberto del Blanco, Ergina Kavallieratou and Narciso Garcia. Overview of the ImageCLEFsecurity 2019 Task., CLEF working notes, CEUR, 2019

Karampidis, K., G. Papadourakis, and I. Deligiannis. "File Type Identification-A Literature Review." 9th International Conference on New Horizons in Industry Business and Education, NHIBE 2015

(Abstract-reviewed)

Vasilakis et. al. "Enhancing Copyright Protection with AES Encryption and Steganography a Comprehensive Approach for E-Books", AMIES 2023, Ierapetra, Greece, September 2023

Theodoropoulos et. al. "Classification of Myocardial Perfusion SPECT Images through Deep Learning", AMIES 2023, Ierapetra, Greece, September 2023

Marinakis et. al. "Lung cancer Computer-Aided Diagnosis System (CADx) with 3D deep convolutional neural networks", AMIES 2023, Ierapetra, Greece, September 2023

Landrain et. al. "Comparative Analysis of Machine Learning Models for Network Intrusion Detection", AMIES 2023, Ierapetra, Greece, September 2023

Karampidis et. al. "CAT-SL: Deploying Machine Learning & Computer Vision on Sign Language teaching", AMIES 2023, Ierapetra, Greece, September 2023

Karampidis et. al. "DICYTECH: A hands on approach to cybersecurity training for industrial technicians", AMIES 2022, Antwerp, Belgium, September 2022

Karampidis et. al. "CAT-SL: An open-source global approach for Sign Language teaching", AMIES 2022, Antwerp, Belgium, September 2022

Dimitrios Theodoropoulos, Konstantinos Karampidis, Giorgos Papadourakis, Fanis Zampetakis "Deploying Generative Adversarial Networks to evaluate the coronary arteries patency in CT angiography", AMIES 2022, Antwerp, Belgium, September 2022

Dimitrios Theodoropoulos, Konstantinos Karampidis, Giorgos Papadourakis, Fanis Zampetakis "Evaluating current state of suspect anomalies in medical scans through Deep Learning", AMIES 2022, Antwerp, Belgium, September 2022

Karampidis et. al. “InCys 4.0: Training Industrial Operations Technicians in Cyber Security”, 18th annual Erasmus Congress and Exhibition - ERACON 2022, Thessaloniki, Greece, June 2022

Kompara et. al. “International Sign Everywhere: Towards Internationalisation Of Education And International Mobility Of Deaf Students” 17th annual Erasmus Congress and Exhibition - ERACON 2021, Varna, Bulgaria, July 2021

Giorgos M. Papadourakis, Spyros Panagiotakis, John Fasoulas, Konstantinos Karampidis, Maria Christofaki, Anabel Menica, Xabier Ugarte, Silvano Bertaina, Nuno Escudeiro. “The European program: Open Source Applications for Industrial Automation (OpenIn)”, AMIES 2019, Coimbra, Portugal, September 2019

Dafni Limberidi, Konstantinos Karampidis, Papadourakis Giorgos, Konstantinos Kornarakis, Maria Christofaki, Nuno Escudeiro, Paula Escudeiro. “A Tool Developed for Assisted Communication with Deaf Students”, AMIES 2019, Coimbra, Portugal, September 2019

Konstantinos Karampidis et. al. “Industrial CyberSecurity 4.0: Discovering and filling the evident gap in awareness in cyber security for operational technicians in Industry 4.0”, AMIES 2019, Coimbra, Portugal, September 2019

Dafni Lymperidi, Konstantinos Karampidis, Giorgos M. Papadourakis, Konstantinos Kornarakis, Maria Christofaki, Nuno Escudeiro, Paula Escudeiro. “International Assisted Communication for Education (I-ACE): Greek Contribution” , 15th annual Erasmus Congress and Exhibition - ERACON 2019, Paphos, Cyprus, May 2019

Giorgos M. Papadourakis, Ioannis Marinakis, Giorgos Peirasmaki, Konstantinos Karampidis, Nuno Escudeiro “Blended Academic International Mobility: a) Application for people with epilepsy, b) Chatbot assistant for retail stores” 17th International Symposium on Ambient Intelligence and Embedded Systems – AMIES 2018, Kiel, Germany, September 2018.

Giorgos M. Papadourakis, Spyros Panagiotakis, John Fasoulas, Konstantinos Karampidis, Maria Christofaki, Anabel Menica, Xabier Ugarte, Silvano Bertaina, Nuno Escudeiro “Open Source Applications for Industrial Automation (OpenIn) using Arduino” 17th International Symposium on Ambient Intelligence and Embedded Systems – AMIES 2018, Kiel, Germany, September 2018.

Konstantinos Karampidis, Giorgos M. Papadourakis, Konstantinos Kornarakis, Dafni Limberidi, Maria Christofaki, Nuno Escudeiro, Paula Escudeiro. “I-ACE Erasmus + Project International Assisted Communication for Education”, 17th International Symposium on Ambient Intelligence and Embedded Systems – AMIES 2018, Kiel, Germany, September 2018.

ADMINISTRATIVE EXPERIENCE

Hellenic Mediterranean University Member of the General Assembly of the "Electronics, Systems and Computer Technology» Division of the Department of Electrical and Computer Engineering	Duration 1/9/2022-31/08/2024
Hellenic Mediterranean University Substitute member of the General Assembly of the Department of Electrical and Computer Engineering	Duration 1/9/2022-31/08/2023
Hellenic Mediterranean University Member of the General Assembly of the Department of Electrical and Computer Engineering	Duration 1/9/2023-31/08/2024
Hellenic Mediterranean University Member of the Dean’s committee of the School of Engineering	Duration 1/9/2021-31/08/2024
Hellenic Mediterranean University Substitute member of the objections committee of the Special Account for Funds and Research	Duration 1/1/2021-31/12/2021
Hellenic Mediterranean University Member of the committee for the evaluation of the results of the regular tenders and negotiation procedures below the thresholds	Duration 1/1/2021-31/12/2021

PROFESSIONAL EXPERIENCE

TEI of Crete, Heraklion 12/6/2017-2/12/20
IT Department
My role in the department was to maintain the existing institute’s websites and to create new ones. I was –mainly- working with Drupal and Wordpress and I also had to maintain the Apache servers that hosted the websites. The development of new plugins was also one of my duties.

PROFESSIONAL TRAINING

Workshops
Google DevFest “Building an IoT empire” 27/11/2015

Seminars
University of Crete – Computer Science Department 12-18/12/2014
Seminar’s topic: ““Key programming subjects in the development of dynamic web applications”

University of Crete – Computer Science Department 31/3/2015 – 03/4/15
Seminar’s topic: “Open Source Learning Management Systems - Moodle – Eclass”

PROFESSIONAL AFFILIATIONS

Hellenic Artificial Intelligence Society (EETN), Full member.	2016-present
Hellenic Society of Computer Sciences and Communications (EPY), Full member – Registration Number 5202.	2016-present
Intelligent Systems & Computer Architecture Laboratory – HMU,	2017-present

PROFESSIONAL SERVICE

Conference Program Committee Member

- 11th International Conference on Digital Image Processing and Vision (ICDIPV 2022)
July 23 ~ 24, 2022, Toronto, Canada
<https://www.itcse2022.org/icdipv/committee>
- International Symposium on Ambient Intelligence and Embedded Systems (AMIES 2022)
September 14 ~ 17, 2022, Antwerp Belgium
https://international-symposium.org/amies_2022/committees.html
- International Conference on Signal Processing and Vision (SIGV 2022)
December 17 ~ 18, 2022, Dubai, UAE
<https://cse2022.org/sigv/committee>
- 9th International Conference on Signal Processing (CSIP 2022)
December 22 ~ 23, 2022, Sydney, Australia
<https://inwes2022.org/csip/committee>
- 9th International Conference on Information Technology Convergence and Services (ITCSS 2023)
January 28 ~ 29, 2023, Copenhagen, Denmark
<https://acsty2023.org/itcss/committee>
- 12th International Conference on Embedded Systems and Applications (EMSA 2023)
March 18 ~ 19, 2023, Vienna, Austria
<https://www.ccsea2023.org/emsas/committee>
- 4th International Conference on Blockchain and Internet of Things (BIoT 2023)
March 18 ~ 19, 2023, Vienna, Austria
<https://www.ccsea2023.org/biot/committee>
- 10th International Conference on Signal and Image Processing (SIGL 2023)

May 20 ~ 21, 2023, Zurich, Switzerland

<https://cosit2023.org/sigl/committee>

- 9th International Conference on Cryptography and Information Security (CRIS 2023)
May 20 ~ 21, 2023, Zurich, Switzerland
<https://cosit2023.org/cris/committee>
- 15th International Conference on Network and Communications Security (NCS 2023)
June 17 ~ 18, 2023, Sydney, Australia
<https://cseit2023.org/ncs/committee>
- 4th International Conference on Natural Language Processing and Computational Linguistics (NLPCL 2023)
July 22 ~ 23, 2023, Toronto, Canada
<https://ccsit2023.org/nlpcl/committee>
- 9th International Conference on Artificial Intelligence and Fuzzy Logic Systems (AIFZ 2023)
September 16 - 17, 2023, Copenhagen, Denmark
<https://csity2023.org/aifz/committee>
- International Symposium on Ambient Intelligence and Embedded Systems (AMIES 2023)
September 27 ~ 30, 2023, Sitia, Greece
https://international-symposium.org/amies_2023/committees.html
- 9th International Conference on Signal Processing and Pattern Recognition (SIPR 2023)
October 28 ~ 29, 2023, Vienna, Austria
<https://www.csen2023.org/sipr/committee>
- 10th International Conference on Artificial Intelligence and Applications (ARIA 2023)
October 28 ~ 29, 2023, Vienna, Austria
<https://www.csen2023.org/aria/committee>
- 11th International Conference on Artificial Intelligence and Applications (AIAP 2024)
January 20 ~ 21, 2024, Zurich, Switzerland
<https://ccseit2024.org/aiap/committee>
- 4th International Conference on NLP and Text Mining (NLTM 2024)
January 27 ~ 28, 2024, Copenhagen, Denmark
<https://ccnet2024.org/nltm/committee>

Peer-reviewed articles for:

- IEEE Transactions on Industrial Informatics – IF 11.648
- IEEE Transactions on Multimedia – IF 8.182
- International Journal of Interactive Multimedia & Artificial Intelligence –IF 4.936
- Sensors – IF 3.847
- Energies – IF 3.252
- Journal of Marine Science and Engineering - IF 2.9
- Applied Sciences – IF 2.838
- Arabian Journal for Science and Engineering – IF 2.807
- Entropy – IF 2.738
- Electronics – IF 2.690
- Mathematics – IF 2.592
- Mathematical Biosciences and Engineering (MBE) – IF 2.194
- Journal of Integrative Neuroscience - IF 1.8

LANGUAGES

English: Superior reading, speaking and writing

COMPUTER SKILLS

Programming: Python, Matlab, GNU/Octave, HTML/CSS, MySQL

Applications: Weka, KNIME, Sleuth Kit Autopsy Digital Forensics, EnCase, MS Office

Operating Systems: Linux, Windows, MacOS

Special Operating Systems: Kali Linux, Caine, Deft, Parrot, Sift Workstation

OTHER

Amateur runner – long distances up to Marathon