



Eleni G. Symeonaki

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https://scholar.google.com/citations?user=w112_kAAAAJ&hl=el&oi=ao

PROFILE

Eleni Symeonaki is a Laboratory Teaching Staff member of the Department of Industrial Design and Production Engineering at the University of West Attica in Athens, Greece with cognitive field in the “Internet of Things and Sustainable Development”. She is also, a member of the research lab of Electronic Automation, Telematics and Cyber-Physical Systems at the same department.

Ms. Symeonaki has received her first degree in Automation Engineering by the Technological Educational Institute of Piraeus, while her Master’s degree in Industrial Automation has been awarded with distinction by the Piraeus University of Applied Sciences. Since February 2017, she is a PhD candidate at the Department of Natural Resources Management & Agricultural Engineering of the Agricultural University of Athens.

Her research which is focused on Industry 4.0 technologies, including amongst others, the Internet of Things, Middleware, Cloud Computing, Information Systems, Operations Management, HMI, M2M and Cyber-physical Systems, has been published in several journals, book chapters and international scientific conference proceedings, receiving multiple references.

GENERAL INFORMATION

DATE OF BIRTH: 29th August, 1974

PLACE OF BIRTH: Athens, Greece

NATIONALITY: Greek

PRESENT POSITION

Laboratory Teaching Staff

Department of Industrial Design and Production Engineering
School of Engineering – University of West Attica, Greece

Cognitive Field: Internet of Things and Sustainable Development

Position Rate: A’

EDUCATION**Ph.D. Candidate, Agricultural University of Athens, Greece***(since 02/2017)*Dissertation Research Field: Middleware and Cloud Engineering Technologies in Precision AgricultureDissertation Advisors: Prof. Konstantinos Arvanitis (*Supervisor*), Associate Prof. Spyros Fountas, Prof. Dimitrios Tseles.**M.Sc. in Industrial Automation, Piraeus University of Applied Sciences, Greece***(06/2016)*Thesis: Post-implementation Evaluation of a University Management Information SystemThesis Advisor: Prof. Dimitrios Tseles**B.Eng. in Automation, Technological Educational Institute of Piraeus, Greece***(06/2004)***TRAINING & SKILLS****Seminars**

ISO 9001 Internal Quality Auditor

Certification: SCC 30/12

e-Government and Citizens

National Centre for Public Administration & Local Government (EKDDA)

Certification: 11.10.167.762

Enhancing the Participation of Women in Positions of Responsibility in Public Administration and Local Government

National Centre for Public Administration & Local Government (EKDDA)

Certification: 11.10.251.328**Languages**

- GREEK: Mother tongue
- ENGLISH: Proficient (Level C2 | Certificate of Proficiency in English, Cambridge University, UK)
- ITALIAN: Upper-Intermediate (Level B2 | Certificato Statale di Conoscenza della Lingua Italiana)
- FRENCH: Basic (Level A2 | High School Education)

Skills

- Websites Design and Development
- Software Packages: MS-Office, SPSS, Solidworks, Autocad, Matlab, Labview, Protégé, etc.
- Programming: Python, C++, Java, JavaScript, SQL, HTML, PHP, CSS, etc.

ACADEMIC EXPERIENCE**Laboratory Teaching Staff**Department of Industrial Design and Production Engineering
School of Engineering – University of West Attica, Greece*(03/2018 - present)*Department of Automation Engineering
Faculty of Applied Sciences – Piraeus University of Applied Sciences, Greece*(01/2018 – 03/2018)***Specialized Technical Laboratory Staff**Department of Automation Engineering
Faculty of Applied Sciences – Piraeus University of Applied Sciences, Greece*(07/2017 – 01/2018)*

Academic Fellow

Department of Automation Engineering (10/2016 – 07/2017)
 Faculty of Applied Sciences – Piraeus University of Applied Sciences, Greece

Laboratory Associate

Department of Automation Engineering (10/2009 – 07/2013)
 Faculty of Applied Sciences – Piraeus University of Applied Sciences, Greece

TEACHING EXPERIENCE**Undergraduate Courses**

Department of Industrial Design and Production Engineering
 School of Engineering – University of West Attica, Greece

- Interactive Systems (09/2021– present)
- Manufacturing Systems
- Computer Aided Design and Production (CAD-CAM)
- Data Acquisition and Analysis
- Design and Programming of Industrial Manufacturing Systems (03/2018 – 8/2021)
- Human-Machine Interaction
- Internet of Things and Embedded Systems
- Cyber-Physical Systems
- CAD/CAM
- Probabilities - Statistics, Introduction to Stochastic Analysis

Department of Automation Engineering (10/2009 – 03/2018)
 Faculty of Applied Sciences – Piraeus University of Applied Sciences, Greece

- CAD/CAM
- Motion Control
- Industrial Controllers (PLC)
- CNC Technology
- Electronic Systems

Postgraduate Courses

Postgraduate Program of Studies: “Industrial Automation” (09/2017 - present)
 Department of Industrial Design and Production Engineering
 School of Engineering – University of West Attica, Greece

- Automation Information Systems
- Research Methodology and Project Management

Postgraduate Program of Studies: “New Technologies in Shipping and Transport” (05/2019 - present)
 Department of Industrial Design and Production Engineering (University of West Attica) &
 Department of Shipping Trade and Transport (University of Aegean), Greece

- Data Transmission Networks
- Naval Information Systems

Postgraduate Program of Studies: “Unmanned Autonomous and Remote-Controlled Systems” (09/2021 - present)
 Department of Industrial Design and Production Engineering (University of West Attica), Greece

- Unmanned Aerial and Space Systems

ADMINISTRATIVE EXPERIENCE**Administrative Staff**

Department of Automation Engineering (03/2006 – 07/2017)
 Faculty of Applied Sciences – Piraeus University of Applied Sciences, Greece
Areas of Expertise: Automation Engineering | Informatics

Project Management – Administrative / Technical Support

Preparation of HEDNO Technical Staff for participation in an upgrade examination process of professional license (12/2021 – present)
 Special Account for Research Grants, University of West Attica, GR

Laboratories Leasing for Examinations of the Practical Part for Technical Professions Licensing according to Law 3982/2011 (1/2021 – present)
 Special Account for Research Grants, University of West Attica, GR

Postgraduate Program of Studies: “Industrial Automation” (02/2016 – present)
 Department of Industrial Design and Production Engineering
 School of Engineering – University of West Attica, GR

Postgraduate Program of Studies: “New Technologies in Shipping and Transport” (12/2020)
 Department of Industrial Design and Production Engineering (University of West Attica)
 & Department of Shipping Trade and Transport (University of Aegean), GR

Employment and Career Structure Program [MIS 303809] (09/2014 – 10/2015)
 National Strategic Reference Framework (NSRF) 2007-2013
 Special Account for Research Grants, Piraeus University of Applied Sciences, GR

Reformation of Undergraduate Studies (09/2004 – 12/2006)
 Second Operational Program for Education and Basic Vocational Training
 National Strategic Reference Framework (NSRF) 2000-2006
 Special Account for Research Grants, Piraeus University of Applied Sciences, GR

Expansion of Tertiary Education (01/2004 – 05/2004)
 Second Operational Program for Education and Basic Vocational Training (01/2002 – 05/2003)
 National Strategic Reference Framework (NSRF) 2000-2006
 Special Account for Research Grants, Piraeus University of Applied Sciences, GR

Postgraduate Program of Studies: “Information Technology” (01/2004 – 05/2004)
 Technological Educational Institute of Piraeus, GR & University of Paisley, Scotland, UK (01/2002 – 05/2003)

Elective Program of Studies “Industrial Informatics” (04/1999 – 08.2004)
 First & Second Operational Program for Education and Basic Vocational Training
 National Strategic Reference Framework (NSRF) 2000-2006
 Special Account for Research Grants, Technological Educational Institute of Piraeus, GR

RESEARCH PROJECTS

Performance and interoperability tests of the individual systems comprising the GRIDS system - Cross-border functionality tests

Project Title: GRIDS - Increasing Trust with eId for Developing Business (INEA / CEF) (4/2021 – 12/2021)

Project Leader: Dr. Petros Kavassalis (Associate Professor)

Special Account for Research Grants, University of Aegean, GR

Research, Design and Development of Microcontrollers and Electronic Circuits Software

Project Title: Design and Development of Autonomous Gear Box's Control System for Heavy Constructions Vehicles (SG-BOX) (11/2018 – 04/2019)

Project Leader: Dr. Dimitrios Piromalis (Assistant Professor)

Special Account for Research Grants, University of West Attica, GR

Research and Design of Embedded Systems and Wireless Networking

Project Title: Design and Development of Portable Device aiding Parkinson's patients to experience visual and audible features in order to cope with the symptoms of Kinesia Paradoxa» (05/2014 – 08/2014)

Project Leader: Dr. Dimitrios Piromalis (Assistant Professor)

Special Account for Research Grants, Piraeus University of Applied Sciences, GR

MEMBERSHIPS & RELEVANT ACTIVITIES

Member of the Research Lab “Electronic Automation, Telematics and Cyber-Physical Systems”

Department of Industrial Design and Production Engineering

School of Engineering – University of West Attica, GR

Research Labs Associate

- Laboratory of Industrial Systems and Mechatronics Applications
Department of Industrial Design and Production Engineering
School of Engineering – University of West Attica, GR
- Laboratory of Computational Intelligence and Intelligent Systems
Department of Industrial Design and Production Engineering
School of Engineering – University of West Attica, GR
- Non-destructive Techniques Laboratory
School of Engineering – University of West Attica, GR
- Information Management Lab (i4mLab)
Department of Financial and Management Engineering
Polytechnic School – University of Aegean, GR

Reviewer of International Scientific Journals:

- | | |
|----------------------|---------------------------|
| - IEEE Access | - Remote Sensing (MDPI) |
| - Futures (Elsevier) | - Electronics (MDPI) |
| - Sensors (MDPI) | - Applied Sciences (MDPI) |

Technical Organizing Committee Member of the International Scientific Conferences “eRA -The SynEnergy Forum”

Thesis Projects Supervision

Webpages Design, Development and Maintenance

Book Editor “Data Acquisition Systems” Author: D. I. Tseles (ISBN: 960-8165-37-7)

PUBLICATIONS**Book & Collective Volumes Chapters**

1. Symeonaki E., Arvanitis K.G., Loukatos D., Piromalis D. (2021) Enabling IoT Wireless Technologies in Sustainable Livestock Farming Toward Agriculture 4.0. In: Krause P., Xhafa F. (eds) IoT-based Intelligent Modelling for Environmental and Ecological Engineering. Lecture Notes on Data Engineering and Communications Technologies, vol 67. Springer, Cham. https://doi.org/10.1007/978-3-030-71172-6_9
2. Eleni G. Symeonaki, Konstantinos K. Arvanitis, Dimitrios D. Piromalis, Chapter 9: Cloud Computing for IoT Applications in Climate-Smart Agriculture: A Review on the Trends and Challenges Toward Sustainability, Book Title: Innovative Approaches and Applications for Sustainable Rural Development, Series: Springer Earth System Sciences, 1st Ed. 2018, Springer, ISBN 978-3-030-02311-9
3. Eleni Symeonaki, Konstantinos Arvanitis, Dimitrios Piromalis, Dimitrios Tseles, Chapter 13: A Survey on the Integration of Internet of Things and Cloud Computing for Precision Agriculture, 16th NETTIES Conference. In M.Bottis and J.Günther (Eds.), Access to Knowledge in the 21st Century: The Interplay of Society, Education, ICT and Philosophy, Vol. 6, pp. 117-121, IAFeS Edition, Vienna, Austria, 2018. ISBN: 978-3-9503983-5-9At: Corfu Island, Greece, May 3-4, 2018

Journals (peer reviewed)

1. Konstantinos G. Arvanitis, Eleni G. Symeonaki (2020) Agriculture 4.0: The Role of Innovative Smart Technologies Towards Sustainable Farm Management, The Open Agriculture Journal, Vol. 14; pp. 130-135; doi: 10.2174/1874331502014010130
2. Symeonaki, Eleni; Arvanitis, Konstantinos; Piromalis, Dimitrios. 2020. A Context-Aware Middleware Cloud Approach for Integrating Precision Farming Facilities into the IoT toward Agriculture 4.0. Applied Sciences 10, no. 3: 813; doi:
3. Symeonaki, E. G., Arvanitis, K. G., & Piromalis, D. D. (2019). Current trends and challenges in the deployment of IoT technologies for climate smart facility agriculture. International Journal of Sustainable Agricultural Management and Informatics (IJSAMI), 5(2/3); pp.181 – 200
4. M. Papoutsidakis, E. Symeonaki, A. Chatzopoulos, D. Piromalis (2018) IoT Design to Support Wireless Sensor Networks and Data Transmission, International Journal of Engineering and Science Invention (IJESI), ISSN (Online):2319-6734, Vol.7, Issue 10, Ver. IV; pp. 54-62
5. M. Papoutsidakis, E. Symeonaki, D. Piromalis, C. Drosos (2018) The Use of Wireless Sensors Network for Supporting Human Daily Activities, International Journal of Engineering and Science Invention (IJESI), ISSN (Online):2319-6734, Vol.7, Issue 10, Ver. V; pp. 21-26
6. M. Papoutsidakis, A. Chatzopoulos, D. Piromalis, E. Symeonaki (2018) A Summary of Future Trends in Automation Industrial Processes, International Journal of Engineering and Science Invention (IJESI), ISSN (Online):2319-6734, Vol.7, Issue 10, Ver. V; pp. 48-55
7. M. Papoutsidakis, D. Piromalis, E. Symeonaki, A. Chatzopoulos (2018) The Use of Automation Applications for Efficient Braking of Modern Wind Turbines, International Journal of Engineering and Science Invention (IJESI), ISSN (Online):2319-6734, Vol.7, Issue 10, Ver. V; pp. 10-20
8. M. Papoutsidakis, A. Chatzopoulos and E Symeonaki. Automation Upgrade via PLC Applications for Big Harbor Delivery Facilities. International Journal of Computer Applications 179(30):39-44, March 2018
9. M. Papoutsidakis, A. Chatzopoulos, E Symeonaki and D Tseles. Methodology of PID Control – A Case Study for Servomotors. International Journal of Computer Applications 179(30):30-33, March 2018.
10. M. Papoutsidakis, A. Chatzopoulos, E Symeonaki and D Tseles. Methodology of PID Control – A Case Study for Stepper Motors. International Journal of Computer Applications 179(30):34-38, March 2018
11. M. Papoutsidakis, C. Drosos, E. Symeonaki, D. Tseles (2018) The Biomass As An Energy Source And Its Application Benefits, International Journal of Engineering, Applied Sciences and Technology (IJEAST), ISSN: 2455-2143, Vol. 2, Issue 10; pp. 1-5
12. M. Papoutsidakis, D. Piromalis, E. Symeonaki, D. Tseles (2018) Hybrid Photovoltaic Elements and their Evolution for Thermal Applications, International Journal of Engineering, Applied Sciences and Technology (IJEAST), ISSN: 2455-2143, Vol. 2, Issue 10; pp. 6-10
13. M Papoutsidakis, E Symeonaki, D Piromalis and D Tseles. Modern Shipping Navigation based on Telemetry and Communication Systems. International Journal of Computer Applications 176(8):39-43, October 2017
14. Eleni Symeonaki, Michail Papoutsidakis and Dimitrios Tseles. Evaluation of e-Governance Automated Processes in University Administration. International Journal of Computer Applications 175(8):24-32, October 2017
15. M Papoutsidakis, D Piromalis, E Symeonaki and D Tseles. IoT in Conjunction with Cloud Services for Industrial Applications Optimization. International Journal of Computer Applications 167(12):42-48, June 2017
16. M. Papoutsidakis, E. Symeonaki, G.P. Smyrniou, D. Tseles (2017) Intelligent Access Point Based on a Typical μ Controller's Functionality. International Journal of Engineering Applied Sciences and Technology (IJEAST), ISSN: 2455-2143, Vol. 2, Issue 5; pp. 8-13
17. M. Papoutsidakis, G.P. Smyrniou, E. Symeonaki, D. Tseles (2017) Automated Management System for Large Vehicle Junctions. International Journal of Engineering Applied Sciences and Technology (IJEAST), ISSN: 2455-2143, Vol. 2, Issue 5; pp. 1-7

18. M. Papoutsidakis, E. Symeonaki, C. Psomopoulos, D. Tseles (2016) Rebuilding of a Classical Robotic System with a Modern Control Software and Sensor Signals. *Sensors & Transducers Journal*, ISSN: 2306-8515, e-ISSN 1726-5479, Vol. 200 Issue 5; pp:16-23

International Conference Proceedings (*peer reviewed*)

1. IoT Devices Applied to Smart Agriculture: Analysis of a Chatbot System Design. In: Bi Y., Bhatia R., Kapoor S. (eds) *Intelligent Systems and Applications. Proceedings of the 2019 Intelligent Systems Conference (IntelliSys)*. Sept. 5-6, 2019, London UK. *Advances in Intelligent Systems and Computing*, vol 1037. Springer, Cham. pp. 1071-1088
2. Eleni Symeonaki, Konstantinos Arvanitis, Panagiotis Papageorgas, Dimitrios Piromalis, *Intelligent Conversational Agent Integration to a Social Media Platform for controlling IoT devices in Smart Agriculture Facilities*. In *Digitizing Agriculture, Proceedings of the 12th EFITA International Conference*, Rhodes island, Greece, 27-29 June, 2019; D. Bochtis, M. Lampridi, A. C. Tagarakis, C. Achillas (eds.); pp. 180-185
3. Symeonaki, E.; Arvanitis, K.; Piromalis, D.; Tseles, D. A survey on the integration of Internet of Things and cloud computing for Precision Agriculture. In *Access to Knowledge in the 21st Century: The Interplay of Society, Education, ICT and Philosophy, Proceedings of 16th NETTIES Conference*, Corfu Island, Greece, May 3-4, 2018; Bottis, M., Günther, J. Eds.; IAFES: Vienna, Austria, 2018; 117-121.
4. Eleni Symeonaki, Konstantinos Arvanitis, Dimitrios Piromalis (2017) *Review on the Trends and Challenges of Cloud Computing Technology in Climate - Smart Agriculture*. In *Proceedings of the 8th International Conference on Information and Communication Technologies in Agriculture, Food & Environment (HAICTA 2017)*; Michail Salampanis, Alexandros Theodoridis, Thomas Bournaris (eds); September 21-24, 2017/ Chania, Crete-Greece, pp.66-78
5. E. Symeonaki, K. Arvanitis, D. Piromalis, *The Development of Internet of Things and Cloud Computing Applications in Precision Agriculture: A Review*, In *Proceedings of the 10th Hellenic Society of Agricultural Engineers Conference*, Athens, Greece; September 28-29, 2017; G. Xanthopoulos, D. Lentzou (eds.) pp:604-614
6. M. Papoutsidakis, M. Sigala, E. Simeonaki, D. Tseles, *Innovative IT System for Material Management in Warehouses*. In *Proceedings of the 2017 International Conference on Mathematical Methods & Computational Techniques in Science & Engineering (MMCTSE 2017)*, Cambridge, United Kingdom; February 24-26, 2017; N. Bardis (ed.) AIP Publishing 1872(1), Sep. 6, 2017; pp. 020010.1–020010.8
7. M. Papoutsidakis, E. Symeonaki and D. Tseles, *The I-term influence in Simulating Hydraulics: A study of classical and intelligent control*. In *Proceedings of the 2016 World Congress on Sustainable Technologies (WCST)*, 12-16 Dec., 2016, London, UK. IEEE 2017; pp. 79-84
8. E. Symeonaki, M. Papoutsidakis, D. Tseles and M. Sigala. *Post-Implementation Evaluation of a University Management Information System (UMIS)*. In *Proceedings of the 2016 Third International Conference on Mathematics and Computers in Sciences and in Industry (MCSI)*, 27-29 Aug. 2016, Chania, Crete, Greece. IEEE 2017; pp. 14-19
9. M. Papoutsidakis, E. Symeonaki, C. Psomopoulos and D. Tseles. *Modern μ controller implementation for interfacing and driving a 3-dimensional computer numerical control machine*. In *Proceedings of the 2016 IEEE 20th Jubilee International Conference on Intelligent Engineering Systems (INES)*, 30 Jun.- 2 Jul. 2016, Budapest, Hungary. IEEE 2016; pp. 279-284
10. N. Vasilakis, D. Pyromalis, E. Symeonaki, D. Tseles, A. Ilavska, M. Supin, A. Daravsi, *Differences in Effectiveness of blended e-learning methods delivering ICT courses for adults between secondary lyceum certification*. eRA-4 International Scientific Conference, Spetses Island, Greece; September 24-26, 2009; eRA-4 Conf. Proc. pp:317-322
11. A. Ioannidis, E. Sofianopoulos, E. Symeonaki, *An Empirical Model on the Effects of Team Leadership and Group Potency on Group Performance – The Greek Reality*, eRA-3 International Scientific Conference, Aegina Island, Greece; September 19-21, 2008; eRA-3 Conf. Proc. pp:15-24

Conference Presentations

1. E. Symeonaki, K. Arvanitis, D. Tseles, D. Piromalis: *Innovations of Cloud Computing Technology in Climate - Smart Agriculture*. Presented at the eRA-12 International Scientific Conference, Athens, Greece; October 24-26, 2017. Session 6