

## Curriculum Vitae

Eirini Aivazidou, Ph.D., M.Sc., M.Eng.

*Assistant Professor*

Department of Industrial Engineering and Management, School of Engineering, International Hellenic University (IHU), Alexandrian Campus of Sindos, Thessaloniki 57400, Greece

Office Address: Heron Building, 1<sup>st</sup> Floor, Room 216; E-mail: [aveirini@ihu.gr](mailto:aveirini@ihu.gr)

### Employment

- 04/2022-today      **Assistant Professor** (tenure track) in *Engineering Economics and Management*, Department of Industrial Engineering and Management, International Hellenic University, Greece
- 03/2020-02/2022    **Postdoctoral Researcher** in *Digital Agriculture*, Institute for Bio-Economy and Agri-Technology, Centre for Research and Technology – Hellas, Greece
- 03/2020-09/2021    **Adjunct Lecturer**, Department of Mechanical Engineering, Aristotle University of Thessaloniki, Greece
- 02/2018-02/2021    **Postdoctoral Researcher** in *Circular Economy*, Department of Mechanical Engineering, Aristotle University of Thessaloniki, Greece
- 06/2018-12/2019    **Research Fellow** in *System Dynamics*, Department of Computer Science and Engineering, Alma Mater Studiorum – University of Bologna, Italy
- 10/2013-06/2018    **Teaching Assistant**, Department of Mechanical Engineering, Aristotle University of Thessaloniki, Greece
- 02/2014-05/2018    **Research Assistant/Associate** in *Supply Chain Management*, Department of Mechanical Engineering, Aristotle University of Thessaloniki, Greece

### Education

- 2013-2017      **Ph.D.** in *Supply Chain Water Footprint Management*, Department of Mechanical Engineering, Aristotle University of Thessaloniki, Greece (Distinction)
- 2014-2015      **M.Sc.** in *Transportation Engineering*, Department of Civil Engineering, Aristotle University of Thessaloniki, Greece (8.68/10, Distinction)
- 2008-2013      **Diploma** in *Mechanical Engineering* (M.Eng. equivalent), Department of Mechanical Engineering, Aristotle University of Thessaloniki, Greece (9.06/10, Distinction, Ranked 1<sup>st</sup>)

### Journal Publications (\*affiliated to IHU)

1. Mallioris, P., **Aivazidou, E.**, Bechtsis, D. (2024), “*Predictive maintenance in Industry 4.0: A systematic multi-sector mapping*”, CIRP Journal of Manufacturing Science and Technology, Vol. 50, pp. 80-103. DOI: [10.1016/j.cirpj.2024.02.003](https://doi.org/10.1016/j.cirpj.2024.02.003) (\*)

2. **Aivazidou, E.**, Tsolakis, N. (2023), *“Water Management and Environmental Engineering: Current Practices and Opportunities”*, Sustainability, Vol. 15, No. 15, pp. 11944. DOI: [10.3390/su151511944](https://doi.org/10.3390/su151511944) (\*)
3. Cunico, G., **Aivazidou, E.**, Mollona E. (2023), *“Investigating Supply and Demand in European Cohesion Policy: Micro-Foundations of Macro-Behaviours”*, Journal of the Knowledge Economy. DOI: [10.1007/s13132-023-01430-6](https://doi.org/10.1007/s13132-023-01430-6) (\*)
4. **Aivazidou, E.**, Tsolakis, N. (2023), *“Transitioning towards human-robot synergy in agriculture: A systems thinking perspective”*, Systems Research and Behavioral Science, Vol. 40, No. 3, pp. 536-551. DOI: [10.1002/sres.2887](https://doi.org/10.1002/sres.2887) (\*)
5. Tsolakis, N., Goldsmith, A.T., **Aivazidou, E.**, Kumar, M. (2023), *“Microalgae-based circular supply chain configurations using Industry 4.0 technologies for pharmaceuticals”*, Journal of Cleaner Production, Vol. 395, pp. 136397. DOI: [10.1016/j.jclepro.2023.136397](https://doi.org/10.1016/j.jclepro.2023.136397) (\*)
6. Bialas, C., Bechtsis, D., **Aivazidou, E.**, Achillas, C., Aidonis, D. (2023), *“A Holistic View on the Adoption and Cost-Effectiveness of Technology-Driven Supply Chain Management Practices in Healthcare”*, Sustainability, Vol. 15, No. 6, pp. 5541. DOI: [10.3390/su15065541](https://doi.org/10.3390/su15065541) (\*)
7. Bialas, C., Bechtsis, D., **Aivazidou, E.**, Achillas, C., Aidonis, D. (2023), *“Digitalization of the Healthcare Supply Chain through the Adoption of Enterprise Resource Planning (ERP) Systems in Hospitals: An Empirical Study on Influencing Factors and Cost Performance”*, Sustainability, Vol. 15, No. 4, pp. 3163. DOI: [10.3390/su15043163](https://doi.org/10.3390/su15043163) (\*)
8. Syrmos, E., Sidiropoulos, V., Bechtsis, D., Stergiopoulos, F., **Aivazidou, E.**, Vrakas, D., Vezinias, P., Vlahavas, I. (2023), *“An Intelligent Modular Water Monitoring IoT System for Real-Time Quantitative and Qualitative Measurements”*, Sustainability, Vol. 15, No. 3, pp. 2127. DOI: [10.3390/su15032127](https://doi.org/10.3390/su15032127) (\*)
9. Cunico, G., **Aivazidou, E.**, Mollona E. (2022), *“Decision-making traps behind low regional absorption of Cohesion Policy funds”*, European Policy Analysis, Vol. 8, No. 4, pp. 439-466. DOI: [10.1002/epa2.1162](https://doi.org/10.1002/epa2.1162) (\*)
10. **Aivazidou, E.**, Aidonis, D., Tsolakis, N., Achillas, C., Vlachos, D. (2022), *“Wine Supply Chain Network Configuration under a Water Footprint Cap”*, Sustainability, Vol. 14, No. 15, pp. 9494. DOI: [10.3390/su14159494](https://doi.org/10.3390/su14159494) (\*)
11. Cunico, G., **Aivazidou, E.**, Mollona E. (2022), *“System Dynamics Gamification: A Proposal for Shared Principles”*, Systems Research and Behavioral Science, Vol. 39, No. 4, pp. 723-733. DOI: [10.1002/sres.2805](https://doi.org/10.1002/sres.2805)
12. **Aivazidou, E.** (2022), *“Water Management in Agriculture and Industry: Challenges, Trends, and Opportunities”*, Sustainability, Vol. 14, No. 1, pp. 66. DOI: [10.3390/su14010066](https://doi.org/10.3390/su14010066)
13. **Aivazidou, E.**, Baniyas, G., Lampridi, M., Vasileiadis, G., Anagnostis, A., Papagergiou, E., Bochtis, D. (2021), *“Smart Technologies for Sustainable Water Management: An Urban Analysis”*, Sustainability, Vol. 13, No. 24, pp. 13940. DOI: [10.3390/su132413940](https://doi.org/10.3390/su132413940)
14. Cunico, G., **Aivazidou, E.**, Mollona E. (2021), *“Beyond financial proxies in Cohesion Policy inputs’ monitoring: A system dynamics approach”*, Evaluation and Program Planning, Vol. 89, pp. 101964. DOI: [10.1016/j.evalprogplan.2021.101964](https://doi.org/10.1016/j.evalprogplan.2021.101964)

15. Tagarakis, A., Benos, L., **Aivazidou, E.**, Anagnostis, A., Kateris, D., Bochtis, D. (2021), *“Wearable Sensors for Identifying Activity Signatures in Human-Robot Collaborative Agricultural Environments”*, Engineering Proceedings, Vol. 9, No. 1, pp. 5. DOI: [10.3390/engproc2021009005](https://doi.org/10.3390/engproc2021009005)
16. **Aivazidou, E.**, Politis, I. (2021), *“Transfer Function Models for Forecasting Maritime Passenger Traffic in Greece under an Economic Crisis Environment”*, Transportation Letters: The International Journal of Transportation Research, Vol. 13, No. 8, pp. 591-607. DOI: [10.1080/19427867.2020.1744224](https://doi.org/10.1080/19427867.2020.1744224)
17. **Aivazidou, E.**, Tsolakis, N. (2021), *“Investigating dynamic interconnections between organic farming adoption and freshwater sustainability”*, Journal of Environmental Management, Vol. 294, pp. 112896. DOI: [10.1016/j.jenvman.2021.112896](https://doi.org/10.1016/j.jenvman.2021.112896)
18. Cunico, G., **Aivazidou, E.**, Mollona, E. (2021), *“Building a dynamic theory of citizens’ awareness of European Cohesion Policy interventions”*, European Journal of Operational Research, Vol. 289, No. 2, pp. 758-773. DOI: [10.1016/j.ejor.2020.07.017](https://doi.org/10.1016/j.ejor.2020.07.017)
19. Rodias, E., **Aivazidou, E.**, Achillas, C., Aidonis, D., Bochtis, D. (2021), *“Water-Energy-Nutrients Synergies in the Agrifood Sector: A Circular Economy Framework”*, Energies, Vol. 14, No. 1, pp. 159. DOI: [10.3390/en14010159](https://doi.org/10.3390/en14010159)
20. **Aivazidou, E.**, Cunico, G., Mollona, E. (2020), *“Beyond the EU Structural Funds’ Absorption Rate: How Do Regions Really Perform?”*, Economies, Vol. 8, No. 3, pp. 55. DOI: [10.3390/economies8030055](https://doi.org/10.3390/economies8030055)
21. Cunico, G., **Aivazidou, E.**, Mollona, E. (2020), *“European Cohesion Policy performance and citizens’ awareness: A holistic System Dynamics framework”*, Investigaciones Regionales – Journal of Regional Research, Vol. 46, pp. 131-162. DOI: [10.38191/iirr-jorr.20.007](https://doi.org/10.38191/iirr-jorr.20.007)
22. **Aivazidou, E.**, Tsolakis, N. (2020), *“A Water Footprint Review of Italian Wine: Drivers, Barriers, and Practices for Sustainable Stewardship”*, Water, Vol. 12, No. 2, pp. 369. DOI: [10.3390/w12020369](https://doi.org/10.3390/w12020369)
23. Tsolakis, N., **Aivazidou, E.**, Srai, J.S. (2019), *“Sensor Applications in Agrifood Systems: Current Trends and Opportunities for Water Stewardship”*, Climate, Vol. 7, No. 3, pp. 44. DOI: [10.3390/cli7030044](https://doi.org/10.3390/cli7030044)
24. **Aivazidou, E.**, Tsolakis, N., Vlachos, D., Iakovou, E. (2018), *“A water footprint management framework for supply chains under green market behaviour”*, Journal of Cleaner Production, Vol. 197, pp. 592-606. DOI: [10.1016/j.jclepro.2018.06.171](https://doi.org/10.1016/j.jclepro.2018.06.171)
25. Vlachos, D., **Aivazidou, E.** (2018), *“Water Footprint in Supply Chain Management: An Introduction”*, Sustainability, Vol. 10, No. 6, pp. 2045. DOI: [10.3390/su10062045](https://doi.org/10.3390/su10062045)
26. Tsolakis, N., Srai, J.S., **Aivazidou, E.** (2018), *“Blue Water Footprint Management in a UK Poultry Supply Chain under Environmental Regulatory Constraints”*, Sustainability, Vol. 10, No. 3, pp. 625. DOI: [10.3390/su10030625](https://doi.org/10.3390/su10030625)
27. **Aivazidou, E.**, Tsolakis, N. (2017), *“Assessing the Water Footprint of Pets: the Case of Small Breed Dogs”*, Chemical Engineering Transactions, Vol. 57, pp. 517-522. DOI: [10.3303/CET1757087](https://doi.org/10.3303/CET1757087)
28. **Aivazidou, E.**, Tsolakis, N., Iakovou, E., Vlachos, D. (2016), *“The emerging role of water footprint in supply chain management: A critical literature synthesis and a hierarchical decision-making framework”*, Journal of Cleaner Production, Vol. 137, pp. 1018-1037. DOI: [10.1016/j.jclepro.2016.07.210](https://doi.org/10.1016/j.jclepro.2016.07.210)

29. **Aivazidou, E.**, Tsolakis, N., Vlachos, D., Iakovou, E. (2015), *“Water Footprint Management Policies for Agrifood Supply Chains: A Critical Taxonomy and a System Dynamics Modelling Approach”*, Chemical Engineering Transactions, Vol. 43, pp. 115-120. DOI: [10.3303/CET1543020](https://doi.org/10.3303/CET1543020)
30. **Aivazidou, E.**, Iakovou, E., Vlachos, D., Keramydas, C. (2013), *“A Methodological Framework for Supply Chain Carbon Footprint Management”*, Chemical Engineering Transactions, Vol. 35, pp. 313-318. DOI: [10.3303/CET1335052](https://doi.org/10.3303/CET1335052)

### Research Activity

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|-----------|---|
| 2020-2022 | <i>“Human-Robot Synergetic Logistics for High Value Crops”</i> (acronym: SYNERGIE), Centre for Research and Technology – Hellas, Researcher<br><u>Funder</u> : Hellenic Foundation for Research and Innovation, Greece  |
| 2018-2019 | <i>“Perception and Evaluation of Regional and Cohesion Policies by Europeans and Identification with the Values of Europe”</i> (acronym: PERCEIVE), Alma Mater Studiorum – University of Bologna, Researcher<br><u>Funder</u> : European Commission (Horizon 2020)  |
| 2014-2015 | <i>“Innovation Capacity Building by Strengthening Expertise and Research in the Design, Planning and Operations of Green Agrifood Supply Chains”</i> (acronym: GREEN-AgriChains), Aristotle University of Thessaloniki, Researcher<br><u>Funder</u> : European Commission (FP7)                                       |
| 2013-2014 | <i>“Feasibility Study for the Establishment of Dual Initial Vocational Education and Training in Schools and Enterprises in the Transport and Logistics Sectors in Greece”</i> , Aristotle University of Thessaloniki, Researcher<br><u>Funder</u> : Federal Institute for Vocational Education and Training, Germany |

### Teaching Activity

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| 2022-today | Postgraduate courses: <i>“Production Systems”</i> , Department of Industrial Engineering and Management, International Hellenic University  |
| 2022-today | Undergraduate courses: <i>“Linear Algebra”</i> , <i>“Micro-/Macroeconomics”</i> , <i>“Multivariate Calculus”</i> , <i>“Entrepreneurship”</i> , Department of Industrial Engineering and Management, International Hellenic University |
| 2020-2021  | Undergraduate courses: <i>“Multivariate Statistics”</i> , <i>“Reliability and Maintenance”</i> , <i>“Forecasting Techniques”</i> , Department of Mechanical Engineering, Aristotle University of Thessaloniki                         |
| 2013-2018  | Undergraduate courses: <i>“Operations Research”</i> , <i>“Inventory Management”</i> , <i>“Supply Chain Management”</i> , <i>“Simulation”</i> , Department of Mechanical Engineering, Aristotle University of Thessaloniki             |

### **Awards**

- Ph.D. Fellowship for excellent research proposal (2014-2017), Public Benefit Foundation Alexander S. Onassis
- Honorary Award for excellent undergraduate studies' performance (2017), Technical Chamber of Greece
- Scholarship for excellent undergraduate studies' performance (2014), Aristotle University of Thessaloniki
- National Scholarship & Award for excellent undergraduate studies' performance (2009-2010), State Scholarships Foundation of Greece

### **Memberships**

- Technical Chamber of Greece (Registration No.: 135064)
- Association of Mechanical-Electrical Engineers of Northern Greece
- Greek Association of Supply Chain Management
- Hellenic Institute of Transportation Engineers
- Aristotle University of Thessaloniki Alumni Association
- Onassis Scholars' Association
- System Dynamics Italian Chapter

### **Languages**

- Greek (mother tongue)
- English (C2) – ECPE Michigan
- Italian (C2) – CELI 5
- German (B1) – Zertifikat Deutsch