

Curriculum Vitae

MARIOS TYROVOLAS

 Konstantinoupoleos 6, Tripolis, GR	 University of Ioannina Profile
 +30 6978405101	 Marios Tyrovolas
 tirovolas@kic.uoi.gr, m.tyrovolas@uoi.gr, mtyrovolas@cti.gr	 Marios Tyrovolas
 July 1st 1996, Greece	 Marios Tyrovolas



PROFESSIONAL EXPERIENCE

09/03/2020	Command Center (4th Infantry Division), Tripolis, Greece	(Military obligations)
- 09/12/2020	Research & Informatics Office	
	<ul style="list-style-type: none">• Computerization• Computer Service	
Nov 2021- Present	Computer Technology Institute & Press “Diophantus”, Patras, Greece	
	Collaborating Researcher	



EDUCATION

Sept 2011	2nd General Lyceum of Tripolis, Greece	
- Jun 2014	Greek Apolytirion (Overall Grade: 18.9 / 20)	
Oct 2014	Diploma in Electrical and Computer Engineering , University of Patras, ECE.	
- Oct 2020	Degree grade: Very Good 7.52/10 5-Year Degree (Equivalent to M.Sc. 300 ECTS). Thesis “ <i>Re-engineering Monolithic Industrial Automation System Application to IoT Technologies based Environment</i> ”	
Mar 2021 -Present	Ph.D. Student in AI and Industry 4.0 University of Ioannina, DIT. Laboratory of Knowledge and Intelligent Computing Supervisor : Chrysostomos Stylios	



PERSONAL SKILLS

General Skills	<ul style="list-style-type: none">• Working effectively in a team• Setting / keeping deadlines and meeting goals, strong organization skills• Problem solving, creative thinking• Self-motivation, passionate, focused and determined execution of tasks and projects• Responsibility
Languages	<ul style="list-style-type: none">• Greek Native language• English University of Westminster: General Level 5 Proficient Communication



TECHNICAL SKILLS

Expertise	<ul style="list-style-type: none">• Industrial Automation• Internet of Things• Design / Development / Evaluation of industrial automation systems
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Computer Programming	<ul style="list-style-type: none"> • C • Python
Office Tools	<ul style="list-style-type: none"> • Microsoft Office • Adobe Acrobat Professional • ABBY FineReader
Control System Design and Computational Programming	<ul style="list-style-type: none"> • Mathworks MATLAB / Simulink • NI LabView • Wolfram Mathematica
Graphics Editing Software	<ul style="list-style-type: none"> • Adobe Photoshop • Adobe Flash Professional
Video Editing Software	<ul style="list-style-type: none"> • Cyberlink PowerDirector
PLC Programming	<ul style="list-style-type: none"> • STEP 7 • Codesys Development System V3
HMI Programming	<ul style="list-style-type: none"> • WinCC Flexible 2008



PROJECTS

Group Python Programming Project	<p>MyLibrary Application for personal library management with user interface using Python & Tkinter Individual part: Group leader, Core code development Supervisor: Prof N. Avouris</p>
Digital Control Project	<p>Hand Following Plotter Construction of a CNC plotter using two ultrasonic sensors Supervisors: Prof. A. Skodras , Dr. T. Chrysikos</p>
Erasmus+ Project	<p>Practical Learning of Artificial iNtelligence on the Edge for indusTry 4.0 (PLANET4) The project aims at filling the gap between scientific research on Artificial Intelligence (AI) and Machine Learning (ML) and its industrial application as enabling technology for the I4.0 paradigm.</p>
Research Project	<p>Dioni: Computational Infrastructure for Processing and Analyzing Big Data Study and implementation of advanced Soft Computing methodologies in the context of the Fourth Industrial Revolution (Industry 4.0).</p>



SCIENTIFIC ACTIVITIES

Reviewer of International Conferences	<ul style="list-style-type: none"> • The 22th IFIP/SOCOLNET Working Conference on Virtual Enterprises, PRO-VE'21 "Smart and Sustainable Collaborative Networks 4.0", Saint Etienne, France, 22-24 November 2021 • 2021 IEEE International Conference on Systems, Man, and Cybernetics (SMC), • 43rd Annual International Conference of the IEEE Engineering in Medicine and Biology Society • IEEE – 6th South-East Europe Design Automation, Computer Engineering, Computer Networks and Social Media Conference, Preveza, Greece, 24-26 September 2021, • 14th IFAC Workshop on Intelligent Manufacturing Systems, Tel Aviv, Israel, 28-30 March 2022
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- 16th IFAC Symposium on Large Scale Complex Systems: Theory and Applications, Xi'an, China, 22-24 April 2022

Reviewer of
International
Journals

- *Risk Analysis: An International Journal* (Wiley Online Library)
- F1000Research open access, scientific publishing platform
- *Fuzzy Sets and Systems* (Elsevier)
- *Information Sciences* (Elsevier)
- *Operational Research* (Springer)



INVITED LECTURES

- University of Piraeus, Piraeus, Greece: “M2M Communications,” invited to speak at the M.Sc. Program in «Digital Culture, Smart Cities, IoT and Advanced Digital Technologies», December 21, 2021 & February 08, 2022.



PUBLICATIONS

M. Tyrovolas and T. Hajnal, “Inter-communication between Programmable Logic Controllers using IoT technologies: A Modbus RTU/MQTT Approach,” *arXiv:2102.05988 [cs, eess]*, Feb. 2021, Available: <http://arxiv.org/abs/2102.05988>

Dec G, Stadnicka D, Paško Ł, Mądziel M, Figliè R, Mazzei D, **Tyrovolas M**, Stylios C, Navarro J, Solé-Beteta X. Role of Academics in Transferring Knowledge and Skills on Artificial Intelligence, Internet of Things and Edge Computing. *Sensors*. 2022; 22(7):2496. <https://doi.org/10.3390/s22072496>

M. Tirovolas and C. Stylios, “Introducing Fuzzy Cognitive Map for predicting Engine’s Health Status,” *IFAC-PapersOnLine*, vol. 55, no. 2, pp. 246–251, Jan. 2022, <https://doi.org/10.1016/j.ifacol.2022.04.201>



REFERENCES

Mr Tibor Hajnal

Engineering Technician at SAUDI ARAMCO
(Engineering Division – Control & Automation Group)
Tel: +966 506430510
Email: hajtec@gmail.com

Prof. Stamatis Manesis

Professor Emeritus Department of Electrical & Computer Engineering (University of Patras)
Tel: 2610 996454
Email: stam.manesis@ece.upatras.gr