

PERSONAL INFORMATION

Laganà Filippo

✉ filippo.lagana@unicz.it

PROFESSIONAL EXPERIENCE

- 01/04/2025-current date **University lecturer**
 UNIVERSITY 'Magna Graecia' of Catanzaro, Catanzaro (Italy)
 - University Lecturer in Digital Electronics and Biomedical Measurements, Bachelor's Degree Program in Biomedical and Computer Engineering, same university.
- 01/02/2023-current date **Research Fellowship**
 UNIVERSITY 'Magna Graecia' of Catanzaro, Catanzaro (Italy)
 - Area 09 Industrial and Information Engineering SSD ING-INF/01 Electronics - THEME OF THE RESEARCH PROJECT: Sensors and electronic systems for biopotential acquisition in ICG, ECG and EMG
- 16/07/2014- 31/01/2023 **Civil servant Administrative Specialist (D - D1)**
 Metropolitan City of Reggio di Calabria, Reggio Calabria (Italy)
 - U.O.A. Provincial Police: Head of proceedings for the management of the Provincial Police Force Minutes Office from 22/06/2016 to 02/09/2018;
 - U.O.A. Metropolitan Police, Civil Protection, Workplace Safety: Office Manager "Workplace Safety Plan" from 02/09/2018 to 31/12/2018;
 -U.O.A. Metropolitan Police, Civil Protection, Safety at Work: R.S.P.P. from 02/09/2018 to 31/12/2018;
 - Planning - Environment and Special Laws: Head of Office: 'Planning, Implementation, Monitoring' from 06/12/2019 ongoing.
- 01/10/2017 present **Subject Tutor Mediterranean University of Reggio Calabria**
 Lecture: Measures for quality management, reliability, and process safety ING-INF/07. Lecture: Electrical, electronic and environmental measurements ING-INF/07; Measures for quality management, reliability, and process safety ING-INF/07
- 09/11/2017–17/10/2018 **Supervised by the Prefecture of Vibo Valentia (VV) to the Municipality of Nicotera - Technical Office**
 Prefecture of Vibo Valentia (VV), Vibo Valentia (Italy)
- 15/02/2011–31/12/2022 **Scientific collaborator for research activities**
 Mediterranea' University of Reggio Calabria - DICEAM Department, Reggio Calabria (Italy)
 - Teaching assistant in the subjects of Measurements for Quality Management, Reliability and Process Safety and Electrical, Electronic and Environmental Measurements;
 - Scientific collaborator for research activities at the Laboratory of Electrotechnics and Non-Destructive Testing Department DICEAM
 - Scientific collaborator in the areas of research in: Non-Disruptive Testing; Circuits and Algorithms for Signal Processing; Soft Computing Techniques and Artificial Intelligence Applied to Inverse Problems; Soft Computing Techniques.

02/05/2009–31/05/2009

Lecturer

Istituto Istruzione Superiore Tecnico Agrario 'ITA IPIA' di Palmi (RC), Italy, Palmi (RC) (Italy)

- External expert lecturer National Operational Programme 2000/2006 Axis III Resources (ESF) Measure 3.14 in agreement with the Province of Reggio Calabria, project for the qualification of "Technician expert in monitoring and environmental control and management of environmental systems "EMAGEST PIT 19".

20/04/2009–30/09/2009

University tutor

Faculty of Engineering 'Mediterranea' University of Reggio Calabria, Reggio Calabria (Italy)

- Academic Tutor 'Learning support actions for students in school-university transition'.

11/11/2008–11/01/2009

Innovation and Research Officer

De Masi Industrie Meccaniche, Gioia Tauro (RC) (Italy)

- Research and Development for Agricultural Machinery.

01/10/2008–01/12/2008

Scientific collaborator

DIMET Department of the Reggio Calabria Faculty of Engineering, Reggio Calabria (Italy)

- Collaborator for the project: "Disciplinary assignment for the performance of analyses to verify the propagation of electromagnetic waves and for the assessment and monitoring for electromagnetic compatibility interference on the territory of the Province of Reggio Calabria"

07/11/2008–07/12/2009

Collaborator for research activities

DIMET Department of the Reggio Calabria Faculty of Engineering, Reggio Calabria (Italy)

- Scientific collaborator in the areas of research in: Non-Disruptive Testing; Circuits and Algorithms for Signal Processing; Soft Computing Techniques and Artificial Intelligence Applied to Inverse Problems; Wavelet Transform; Soft Computing Techniques Applied to Electromagnetic Scattering Phenomena; Antennas and Radio/Microwave Systems.

29/12/2014–29/12/2014

Competent Environmental Acoustics Technician

Calabria Region, Catanzaro (Italy)

-Competent Acoustics Technician Calabria Region LAW 26 OCTOBER 1995, N° 447 - Art. 2, paragraphs 6 and 7

15/10/2014–15/10/2020

Teaching assistant for the subject ELECTRICAL NETWORKS FOR INDUSTRIAL APPLICATIONS (ING-IND/31)

DICEAM Department 'Mediterranea' University of Reggio Calabria (Italy)

-Lecturer

EDUCATION AND TRAINING

17/04/2021

INFORMATION PASSport at Eirsaf Education

COMPUTING AND SECURITY - INTERNET AND ONLINE COLLABORATION - WORD PROCESSING AND IMAGING ADVANCED LEVEL

SPREADSHEET ADVANCED LEVEL - DATABASE ADVANCED LEVEL

PRESENTATION MANAGEMENT ADVANCED LEVEL - E-CITIZEN AND SMART DCA

29/05/2019- 13/07/2020

Second Level University Master's Degree in 'Information & Communication Technology' (ICT), a.y. 2018/2019

Level 8 EQF

UNIVERSITY for Foreigners 'Dante Alighieri' of Reggio Calabria, Reggio Calabria (Italy) Grade 110/110

09/11/2015–16/04/2019	<p>Curriculum vitae</p> <p>Ph. D. in Civil, Environmental and Safety Engineering</p>	<p>Laganà Filippo</p> <p>Level 8 EQF</p>
	<p>UNIVERSITY 'Mediterranea' of Reggio Calabria, Reggio Calabria (Italy), Thesis entitled: '<i>New Life to Sludge: "Study and Design of Innovative Techniques for the Energy and Environmental Recovery of a Sewage Treatment Plant"</i>'.</p>	
15/11/2017–22/12/2018	<p>Master Level I "Didactics, the function of the teacher and the integration of pupils with Special Educational Needs</p> <p>Academy of Fine Arts FIDIA, Stefanaconi VV (Italy)</p> <p>Grade105/110</p>	Level 7 EQF
22/12/2018	<p>Certificate of achievement of 24 CFA/CFU as per DM no. 616 of 10 August 2017</p> <p>Academy of Fine Arts FIDIA, Stefanaconi VV (Italy)</p>	
01/02/2011–21/03/2015	<p>PhD. Biomedical Engineering and Computer Science</p> <p>UNIVERSITY 'Magna Graecia' of Catanzaro, Catanzaro (Italy)</p> <p>Thesis entitled: '<i>Bio-Inspired Ultrasonic System for Time-of-Flight Detection</i>'.</p>	Level 8 EQF
24/02/2014–25/11/2014	<p>Postgraduate Course in Psychopedagogy and Didactics for Specific Learning Disorders</p> <p>UNIVERSITY of UniCusano Studies, Rome (Italy)</p> <p>Thesis entitled: 'Neurobiological and neuropsychological aspects of Memory in SLDs; - The paper carried out research, analysis, and studies on Memory in subjects with Specific Learning Disorders (SLD). Grade110/110 cum Laude</p>	Level 7 EQF
28/05/2011–21/06/2013	<p>Theoretical-Practical Specialisation Course for 'Technician Competent in Environmental Acoustics</p> <p>Order of Engineers of the Province of RC - Regional Agency for Environmental Protection of Calabria (ARPACAL), Reggio Calabria (Italy)</p> <p>POSITIVE result at the learning check on 21/06/2013</p>	
23/03/2009–23/03/2009	<p>Prevention and Protection Service Manager and Officer</p> <p>Register of Engineers of Reggio Calabria, Reggio Calabria (Italy)</p> <p>Examination successfully passed for verification of learning on 21 March 2009</p>	
26/02/2009	<p>Certificate of attendance at the course for Dangerous Goods Transport Consultant D. Lgs. n°40/2000</p> <p>Register of Engineers of the Province of Reggio Calabria, Reggio Calabria (Italy)</p>	
25/10/2007–30/04/2008	<p>INFORMATION ENGINEER - SECTION A -</p> <p>Mediterranea' University of Reggio Calabria - Order of Engineers of the Province of Reggio Calabria, Reggio Calabria (Italy)</p> <p>Degree awarded in the 2007/2008 academic year on 30/04/2008 with grade 167/200</p>	

30/09/2004–24/10/2007

BSc in Electronic Engineering (32/S).

Level 7 EQF

Mediterranea' University of Reggio Calabria, Reggio Calabria (Italy)

Experimental thesis entitled: 'Analysis of PATH LOSS in an Urban Environment: a Soft Computing Approach' - In the paper, research activities were carried out and on-site experiments were conducted to validate the performance of the electromagnetic signal in an urban environment by means of data acquisition and processing in a Matlab and Wireless Insite environment with Neural Network and Support Vector Machine.

Degree awarded in the 2006/2007 academic year with a 101/110 grade.

PERSONAL SKILLS

Mother tongue Italian

Foreign Languages

	UNDERSTANDING		PARLATO		WRITTEN PRODUCTION
	Listening	Reading	Interaction	Oral production	
English	A2	A2	A2	A2	A2
French	B2	B2	A2	A2	B1

Levels: A1 and A2: Basic User - B1 and B2: Independent User - C1 and C2: Advanced User [Common European Framework of Reference for Languages](#)

Communication skills

and good experience in the field of public relations and socio-cultural activities.

Organisational skills and management

I consider myself to be a dynamic, conscientious, determined individual with great versatility and commitment, who is suited to working in a variety of contexts due to my great spirit of sacrifice and adaptation, excellent interpersonal and organizational skills, and predisposition for interpersonal relationships.

Digital competences

SELF-ASSESSMENT				
Information processing	Communication	Content Creation	Security	Troubleshooting
Advanced user	Advanced user	Advanced user	Advanced user	Advanced user

Digital competences - Self-assessment form

ECDL Certificate

Extensive use of computers, the Internet and e-mail.

Operating systems: WINDOWS - GNU-Linux Applications: Office package, Open Office; Libre Office.

Languages: C/C++, ASSEMBLER.

Applications: SPICE, SERENADE, LABVIEW, MATLAB, MS OFFICE, EXPLORER, NETSCAPE, WIRELESS INSITE, HFSS, COMSOL, AUTOCAD, PSPICE; THERMOGRAPHIC APPLICATIONS; MICROCONTROLLERS AND SENSORS.

Knowledge of the most well-known transfer protocols and Internet architecture (TCP/IP,FTP,etc.)

Driving licence

A, B

FURTHER INFORMATION

Scientific Publications

- 1 - CACCIOLA M, CALCAGNO S, DE CARLO D, **LAGANÀ F**, MEGALI G, MORABITO F.C, PELLICANÒ D, and VERSACI M., "Implementation of EC-NDT for in Depth Detection of Defects in Metallic Plates", Proceedings of the COMSOL Conference 2007 Grenoble, France, October 23-24, 2007, acta on CD - rom;
- 2 - MORABITO F.C, CALCAGNO S, CACCIOLA M, GRECO A, **LAGANÀ F**, MEGALI G, PELLICANÒ D, SACCÀ C, VERSACI M, "Monitoraggio e analisi della propagazione delle onde elettromagnetiche sul territorio della Provincia di Reggio Calabria" (in Italian language), Protocollo di intesa tra la Provincia di Reggio Calabria - settore 15 ambiente, energia, demanio idrico e fluviale - and the Dipartimento DIMET dell'Università "Mediterranea" di Reggio Calabria, November 2008;
- 3 - **LAGANÀ F**, CALCAGNO S, CACCIOLA M, DE CARLO D, MEGALI G, VERSACI M, MORABITO F.C (2009). Evaluating support vector Machines for path loss estimation on urban environments, 19th Italian Workshop on Neural Networks, WIRN 2009, Vietri sul Mare, Salerno, Italy, May 2009;
- 4 - CACCIOLA M., CALCAGNO S, **LAGANÀ F**, MEGALI G, PELLICANÒ D, VERSACI M, MORABITO F.C (2009). Advanced Integration of Neural Networks for Characterizing Voids in Welded Strips. In: M. POLYCARPOU, C. PANAYIOTOU, C. ALIPPI, G. ELLINAS. Lecture Notes in Computer Science - Artificial Neural Networks, vol. 5769, no. 2, pp. 455-464, BERLIN: Springer-Verlag Berlin / Heidelberg, ISBN: 978-3- 642-04276-8, doi: 10.1007/978-3-642-04277-5_46;
- 5 - MEGALI G, PELLICANÒ D, CACCIOLA M, CALARCO F, DE CARLO D, **LAGANÀ F**, MORABITO F.C (2009). Modeling Interface Response in Cellular Adhesion. In: Proceedings of the COMSOL Conference 2009. Milan, Italy, October 2009, acta on CD-ROM;
- 6 - CACCIOLA M, CALCAGNO S, **LAGANÀ F**, MEGALI G, PELLICANÒ D, VERSACI M, MORABITO F.C (2009). Neurofuzzy Approach for Reconstructing Fissures in Concret's Reinforcing Bars, in: V. Di Gesù, S. K. Pal and A. Petrosino, WILF 2009. Lecture Notes in Artificial Intelligence, SPRINGER, Berlin (DEU), Vol. 5571, 2009, pp. 171-178, ISBN: 978-3-642- 02281-4;
- 7 - CALCAGNO S, CAMMAROTTO B, **LAGANÀ F**, VERSACI M (2012). DEFECTS CHARACTERIZATION IN CARBON FIBRE REINFORCED POLYMER BY MEANS OF FUZZY SUBSETHOOD CALCULATION. International Association of Science and Technology for Development (IASTED) Conferences SIP 2012 Signal and Image Processing August 20 - 22, 2012 Honolulu, USA;
- 8 - Matteo Cacciola, Salvatore Calcagno, **Filippo Laganà**, Francesco Carlo Morabito, Diego Pellicanò, Isabella Palamara, Mario Versaci 2012. A NEW APPROACH TO EVALUATE DEFECTS IN METALLIC PLATES BASED ON COMPUTING WITH WORDS AND FUZZY ENTROPY (IJMTIE). University "Mediterranea" of Reggio Calabria Department of Mechanics and Materials Via Graziella Feo di Vito, Reggio Calabria, Italy;
- 9 - Maris Pasquale, Matteo Cacciola, **Filippo Laganà**, Diego Pellicanò, 2012. ABOUT PROCESSING OF EXPONENTIALLY DAMPED SIGNALS: A HARDWARE FOR BIOMEDICAL APPLICATIONS (IJMTIE). School of Biomedical Engineering University "Magna Graecia" of Catanzaro Italy and University "Mediterranea" of Reggio Calabria Department of Mechanics and Materials Via Graziella Feo di Vito, Reggio Calabria, Italy;
- 10 - Matteo Cacciola, Salvatore Calcagno, **LAGANA' F**, Francesco Carlo Morabito, Diego Pellicanò, Isabella Palamara, Mario Versaci, Biagio Cammaroto (2013). WAVELET AND UNSUPERVISED LEARNING TECHNIQUES FOR EXPERIMENTAL BIOMEDICAL DATA PROCESSING. INTERNATIONAL JOURNAL OF SYSTEMS AND SERVICE ORIENTED ENGINEERING, ISSN: 1947-3052;
- 11 - S.A. Pullano, M.G. Bianco, C.D. Critello, **F. Laganà**, D. Menniti, F. Ruberto, R. Tiriolo and A.S Fiorillo, 'Biomass Plant and Sensors Network for Process Monitoring and Energy Storage in a Superconducting Magnetic Device', Safety of Technogenyc Environment, vol. 6, 2014. ISSN 2255- 6923;
- 12 - S.A. Pullano, M.G. Bianco, C.D. Critello, **F. Laganà**, D. Menniti, F. Ruberto, R. Tiriolo and A.S Fiorillo, "Biomass Plant for Production of Renewable Energy and Its Storage in a Superconducting Magnetic Device", 55th Riga Technical University Conference SCEE'2014. Scientific Conference on Economics and Entrepreneurship, Riga, October 14-17-2014. ISBN 978-9934-8725-2-5;

13 - **LAGANÀ F**, DE CARLO D, CALCAGNO S, (2017) An Agent-based System to Monitor an Energy Biomass Process. 18th Workshop "From Objects of Agents "Scilla (RC) June 15- 16-17, 2017;

14 - **LAGANÀ F**, DE CARLO D, CALCAGNO S, PULLANO S.A, CRITELLO D, FALCONE F, FIORILLO A. S (2019) "Computational Model of Cell Deformation Under Fluid Flow Based Rolling"- The 7th IEEE International Conference on E-Health and Bioengineering - EHB 2019 - Grigore T. Papa University of Medicine and Pharmacy, Iasi Romania, November 21-23, 2019;

15 - Giovanni Angiulli, Salvatore Calcagno, Domenico De Carlo, **Filippo Laganà** and Mario Versaci (2020) 'Second-Order Parabolic Equation to Model, Analyze, and Forecast Thermal-Stress Distribution in Aircraft Plate Attack Wing-Fuselage' - Mathematics 2020, 8(1), 6;

16 - Rosario Fedele, Filippo Giammaria Praticò, Giuseppe Cogliandro and **Filippo Laganà** (2022) 'Evaluation of the structural health conditions of smart roads using different feature-based methods' - "NEW METROPOLITAN PERSPECTIVES" Proceedings - in Lecture Notes in Networks and Systems (2367-3370), SPRINGER.

17 - Mario Versaci, Giovanni Angiulli, Paolo Crucitti, **Filippo Laganà**, Diego Pellicanò, Annunziata Palumbo (2022) 'A Fuzzy Similarity-Based Approach to Classify Numerically Simulated and Experimentally Detected Carbon Fibre-Reinforced Polymer Plate Defects' - Springer CCIS

18 - **F. Laganà**, D. De Carlo, G. Oliva (2022) "A Low-Cost Approach to Acquisition, Analysis and Development of a Nailfold Capillaroscopy Platform" - 5th International Workshop on Quantum & Biomedical Applications Technologies and Sensors Lugano, 20-21 June 2022;

19 - Mario Versaci, Giovanni Angiulli, Paolo Crucitti, **Filippo Laganà**, Diego Pellicanò, Annunziata Palumbo (2022) 'Innovative Soft Computing Techniques for the Evaluation of the Mechanical Stress State of Steel Plates' - International Conference on Applied Intelligence and Informatics 2022 (All 2022), September 01-03, 2022, Reggio Calabria, Italy;

20 - G. Oliva; M.G. Bianco; **F. Laganà**; D. De Carlo; A.S. Fiorillo; S.A. Pullano (2022) "Nailfold Video Capillaroscopy for the Analysis of Microcirculation" - 2022 10th E-Health and Bioengineering Conference, EHB 2022, 2022

21 - **F. Laganà**; D. De Carlo; S. Calcagno; G. Oliva; S. A. Pullano; A. S. Fiorillo (2022) "Modeling of Electrical Impedance Tomography for Carcinoma Detection" - 2022 10th E-Health and Bioengineering Conference, EHB 2022

22 - MENNITI M, OLIVA G, **LAGANÀ F**, BIANCO M.G, FIORILLO A.S, PULLANO S.A "Portable Non-Invasive Ventilator for Homecare and Patients Monitoring System", The 18th edition of IEEE International Symposium on Medical Measurements and Applications (MeMeA) Jeju, South Korea, June 14 - 16, 2023.

23 - **F. Laganà**; D. Britti; A.S. Fiorillo; S. Pullano; 'New Surface Electrical Charge Detection System for Ecology and Insect Monitoring', The 6th edition of the Workshop 'Biomedical Applications, Technologies and Sensors', Catanzaro, Italy, 28-29 September 2023.

24 - D. Pellicanò. S. Calcagno, D. De Carlo, **F. Laganà**; 'Analysis and study of an integrated system based on eddy current for the osteogenesis process', The 6th edition of the Workshop 'Biomedical Applications, Technologies and Sensors', Catanzaro, Italy, 28-29 September 2023.

25 - Menniti, M., **Laganà, F.**, Oliva, G., Bianco, M., Fiorillo, A. S., & Pullano, S. A. (2024). Development of Non-Invasive Ventilator for Homecare and Patient Monitoring System. Electronics, 13(4), 790. (Scopus-index - Q2).

26 - Versaci, M., Angiulli, G., La Foresta, F., **Laganà, F.**, & Palumbo, A. (2024). Intuitionistic fuzzy divergence for evaluating the mechanical stress state of steel plates subject to bi-axial loads. Integrated Computer-Aided Engineering, (Preprint), 1-17. (Scopus-index - Q2).

27 - **Laganà, F.**, Praticò, D., De Carlo, D., Oliva, G., Pullano, S. A., & Calcagno, S. (2024). Engineering Biomedical Problems to Detect Carcinomas: A Tomographic Impedance Approach. Eng, 5(3), 1594-1614.

28 - **Laganà, F.**, Praticò, D., Angiulli, G., Oliva, G., Pullano, S. A., Versaci, M., & La Foresta, F. (2024). Development of an Integrated System of sEMG Signal Acquisition, Processing, and Analysis with AI Techniques. Signals, 5(3), 476-493.

29 Pullano, S.A.; Oliva, G.; Titirsha, T.; Shuvo, M.M.H.; Islam, S.K.; **Laganà, F.**; La Gatta, A.; Fiorillo, A.S. Design of an Electronic Interface for Single-Photon Avalanche Diodes. Sensors 2024, 24, 5568. <https://doi.org/10.3390/s24175568>

30 Versaci, M., **Laganà, F.**, Morabito, F. C., Palumbo, A., & Angiulli, G. (2024). Adaptation of an Eddy Current Model for Characterizing Subsurface Defects in CFRP Plates Using FEM Analysis Based on Energy Functional. *Mathematics*, 12(18), 2854.

31 Pratico, D., **Laganà, F.**, Oliva, G., Fiorillo, A. S., Pullano, S. A., Calcagno, S., ... & La Foresta, F. (2024, July). Sensors and Integrated Electronic Circuits for Monitoring Machinery On Wastewater Treatment: Artificial Intelligence Approach. In *2024 IEEE Sensors Applications Symposium (SAS)* (pp. 1-6). IEEE.

32 Pullano, S. A., Oliva, G., **Laganà, F.**, Fiorillo, A. S., Pratico, D., Presta, P., ... & Coppolino, G. (2024, July). Development of a Wearable Device for Arteriovenous Fistula Monitoring. In *2024 IEEE Sensors Applications Symposium (SAS)* (pp. 1-4). IEEE.

33 Calomino, C., Bianco, M. G., Oliva, G., **Laganà, F.**, Pullano, S. A., & Quattrone, A. (2024, June). Comparative Analysis of Cross-Validation Methods on PPMI Dataset. In *2024 IEEE International Symposium on Medical Measurements and Applications (MeMeA)* (pp. 1-5). IEEE.

34 Bianco, M. G., **Laganà, F.**, Oliva, G., Menniti, M., Islam, S. K., Hassan, O., ... & Pullano, S. A. (2024, June). Nailfold Video Capillaroscopy Based on Sidestream Dark Field and Stacking Algorithm. In *2024 IEEE International Symposium on Medical Measurements and Applications (MeMeA)* (pp. 1-4). IEEE.

35 Menniti, M., **Laganà, F.**, Bianco, M. G., Oliva, G., Fiorillo, A. S., & Pullano, S. A. (2024, June). Sensorized Non-Invasive Ventilator for Clinical Applications in Telemedicine. In *2024 IEEE International Symposium on Medical Measurements and Applications (MeMeA)* (pp. 1-5). IEEE.

36 De Carlo, D., **Laganà, F.**, Praticò, D., & Pullano, S. A. (2024, November). Development of an Integrated System for Remote Monitoring of Circuit Integrity in Biomedical Devices. In *2024 E-Health and Bioengineering Conference (EHB)* (pp. 1-6). IEEE.

37 Oliva, G., Manin, L., **Laganà, F.**, Menniti, M., Fiorillo, A. S., & Pullano, S. A. (2024, October). Detection of Fatty Acids in Tomato Seeds Oil Through a Zeolite-PID System. In *2024 International Workshop on Quantum & Biomedical Applications, Technologies, and Sensors (Q-BATS)* (pp. 1-5). IEEE.

38 **Laganà, F.**, Pellicanò, D., De Carlo, D., Praticò, D., & Calcagno, S. (2024, October). Evaluation and monitoring of SAR and temperature during an indoor Wi-Fi call. In *2024 International Workshop on Quantum & Biomedical Applications, Technologies, and Sensors (Q-BATS)* (pp. 105-110). IEEE.

39 **Laganà, F.**, Praticò, D., Oliva, G., Calcagno, S., Angiulli, G., De Carlo, D., ... & Pullano, S. A. (2024, October). Developing an electronic device for the acquisition and processing of ECG signals: a Soft Computing approach. In *2024 International Workshop on Quantum & Biomedical Applications, Technologies, and Sensors (Q-BATS)* (pp. 44-49). IEEE.

40 Versaci, M., La Foresta, F., **Laganà, F.**, & Morabito, F. C. (2024). Stand-Alone DC-MSs & TS Fuzzy Systems for Regenerative Urban Design. In *INTERNATIONAL SYMPOSIUM: New Metropolitan Perspectives* (pp. 36-48). Springer, Cham.

41 Praticò, D., Calcagno, S., Gattuso, F., **Laganà, F.**, Oliva, G., Pullano, S. A., & La Foresta, F. (2024). A Soft Computing Approach for Sensory Analysis with Thermographic Techniques for Structural Monitoring of Bronze Statues. In *INTERNATIONAL SYMPOSIUM: New Metropolitan Perspectives* (pp. 160-167). Springer, Cham.

42 **Laganà F.**; Pullano S. A.; Angiulli G.; Versaci M. "Optimized Analytical–Numerical Procedure for Ultrasonic Sludge Treatment for Agricultural Use", *Algorithms*, 2024, vol. 17, pp. 592;

43 Versaci M.; **Laganà F.**; Manin L.; Angiulli G. "Soft computing and eddy currents to estimate and classify delaminations in biomedical device CFRP plates", *Journal of Electrical Engineering*, 2025, vol. 76, pp. 72-79;

44 **Laganà, F.**; Bibbò, L.; Calcagno, S.; De Carlo, D.; Pullano, S.A.; Praticò, D.; Angiulli, G. Smart Electronic Device-Based Monitoring of SAR and Temperature Variations in Indoor Human Tissue Interaction. *Appl. Sci.* 2025, 15, 2439.

45 Bibbò, L.; Angiulli, G.; **Laganà, F.**; Praticò, D.; Cotroneo, F.; La Foresta, F.; Versaci, M. MEMS and IoT in HAR: Effective Monitoring for the Health of Older People. *Appl. Sci.* 2025, 15, 4306.

- Courses**
- The 2008 Financial Law for Local Authorities "Strategies and Tools for Planning 2008" - Reggio Calabria 01/02/2008 - Logos P.A;
 - Consumer Desk Operator - Reggio Calabria 01/04/2008 - Next Association;
 - The New Construction Techniques - Reggio Calabria 22/04/2008 - Order of Engineers of Reggio Calabria;
 - Home and Building Automation - Reggio Calabria 30/05/2014 - Order of Engineers of Reggio Calabria;
 - Atex Electrical Installations in Potentially Explosive Atmospheres - Reggio Calabria. 24/02/2015 - Order of Engineers of Reggio Calabria;
 - Ongoing Evolution of Seismic Geotechnical Regulations - Reggio Calabria 17/02/2015 - Order of Engineers of Reggio Calabria;
 - Refresher course for coordinators for the design and execution of works under Legislative Decree no. 81 of 9 April 2008 - Reggio Calabria 30/04/2015 - Order of Engineers of Reggio Calabria
 - Refresher course for coordinators for the design and execution of works under Legislative Decree no. 81 of 9 April 2008 - Reggio Calabria 21/05/2015 - Order of Engineers of Reggio Calabria
 - Greenports - Reggio Calabria 29/01/2016 - Wavenergy;
 - The new discipline of public procurement - Catanzaro 18/04/2018 - Legacoop Calabria.
 - SAFETY MANAGEMENT FROM THEORY TO PRACTICE" - webinar 06 Jul 2020 cni foundation;
 - "Covid-19 and construction sites: operational guidance for safety management" - webinar 13 Jul 2020 cni foundation
 - "The newly organised PnD workshops and certification of competencies in structural diagnostics. " - webinar 17 Jul 2020 and foundation;
 - "THE CODE OF CONTRACTS AFTER THE UNBLOCKING OF CONSTRUCTION AND THE SIMPLIFICATION DECREE-Criticisms and proposals"- webinar 22 Jul 2020 cni foundation;
 - Ecobonus and Sismabonus at 110%: new regulations and procedures - webinar 27 Jul 2020 cni foundation;
 - THE SOFT SKILLS FOR THE RENOVATION OF THE PROFESSION - webinar 29 Jul 2020 CNI Foundation;
- Conferences**
- Certificate of Participation Compumag Conference 30 June - 4 July 2013 - Budapest;
 - Certificate of Participation 18th Workshop "From Objects to Agents" 15-17 June 2017- Scilla (RC)

Reggio Calabria, 15/04/2025

Eng. Filippo Laganà