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Personal

Born on September 6, 1974.

Italian Citizen.

Current Position

Associate Professor of Control Theory, Department of Engineering and Architecture, University of Trieste, Trieste (Italy).

Education

Ph.D. degree in Industrial and Information Technology Engineering, University of Udine, Udine (Italy), 2005.

M.Sc. degree in Managerial Engineering, University of Udine, Udine (Italy), 2000.

Past Positions

11/2006–10/2017: Assistant Professor, University of Trieste, Trieste (Italy).

06/2005–06/2006: Research Fellow, Department of Mathematics and Computer Science, University of Udine, Udine (Italy).

03/2003–02/2005: Contractor of ISME, Integrated Systems for Marine Environment, Genoa (Italy).

03/2001–02/2003: Research Fellow, International School for Advanced Studies, Trieste (Italy).

07/2000–02/2001: Research Fellow, Department of Mathematics and Computer Science, University of Udine, Udine (Italy).

Fields of Research Interests

Control Theory, Computer Vision, Machine Learning, Robotics.

Teaching

Ph.D.-level Courses

9–11 July, 2007: series of lectures on “Classification and Regression by means of Support Vector Machine”, XI Ph.D. School “Antonio Ruberti”, Bertinoro (Italy), dedicated to Systems Identification.

Graduate and Undergraduate Courses

2018-present: Control Theory, University of Trieste [Primary Instructor, Graduate Course].

2018-present: Computer Vision and Pattern Recognition, University of Trieste [Primary Instructor, Graduate Course].

2010-2017: Robust and Optimal Control, University of Trieste [Primary Instructor, Graduate Course].

2009-2017: Systems and Control Theory, University of Trieste [Assistant Instructor, Graduate Course].

2004-2016: Fundamentals of Automatic Control, University of Trieste [Assistant Instructor, Undergraduate Course].

2006-2010: Complements of Automatic Control, University of Trieste [Primary Instructor, Graduate Course].

2004-2009: Fundamentals of Automatic Control, University of Trieste, Pordenone [Primary Instructor, Undergraduate Course].

Research Projects

Peer-reviewed Research Projects

[Co-Investigator] PRIN 2020, A Holistic Monitoring and Diagnostic Tool for Photovoltaic Generators (HOTSPHOT).

[Principal Investigator] POR FESR 2014-2020 Multi Device Closed Loop Systems.

[Co-Investigator] CESAR, Cost efficient methods and processes for safety relevant embedded systems (MIUR-ARTEMIS).

[Co-Investigator] PRIN 2008, New methodologies for fault diagnosis and fault-tolerant control of non-linear uncertain systems.

[Research Fellow] PRIN 2004, Robust and optimization techniques for high-performance control systems.

[Contractor] HAB-BUOY, In-situ imaging and recognition of harmful algal bloom species by artificial neural network.

[Research Fellow] VENFLEX, Visual recognition and mechanical handling of flexible materials.

Local Research Projects

I participated to many research activities, most of them in collaboration with companies (such as Danieli Automation Spa, Electrolux Spa, Danieli & C. Officine Meccaniche S.p.A, Eidon Kaires Srl) funded for a total of €800.000. Most of the activities are related to Machine Vision, since extracting information from images is becoming crucial in industrial application, for process monitoring and, most importantly, for process control.

Organizational Activities

Member of the Program Committee of the World Conference on eXplainable Artificial Intelligence (xAI 2023), Lisboa, July 2023.

Member of the Program Committee of Automatica.it 2022, Cagliari, September 2022.

Member of the Operating Committee of the 2022 Conference on Control Technology and Applications (CCTA 2022), Trieste, as Local Arrangements Co-Chair.

Member of the Program Committee of Automatica.it 2021, Catania, September 2021.

Member of the Program Committee of Automatica.it 2020, online, September 2020.

Chair of the session entitled Applications of the 9th International Conference on Pattern Recognition Applications and Methods (ICPRAM 2020).

Member of the Program Committee of Automatica.it 2019, Ancona, September 2019.

Member of the Program Committee of Automatica.it 2018, Florence, September 2018.

Member of the Operating Committee of the IEEE Multi-Conference on Systems and Control, Buenos Aires (Argentina), 2016 as Publicity Chair.

Member of the Operating Committee of the IEEE Conference on Decision and Control, Florence (Italy), 2013 as Publicity Chair.

Member of the Program Committee of the International Symposium on Image and Signal Processing and Analysis, Trieste (Italy), 2013

Co-chair of the Special Session on Bio-medical Data Analysis and Diagnosis Tools, ISPA 2013, 8th International Symposium on Image and Signal Processing and Analysis, Trieste (Italy), 2013.

Editorial Activity

From February 1, 2017, to December 31, 2022, Associate Editor of the journal IEEE Control Systems Letters.

From July, 2013 Associate Editor, Conference Editorial Board of the European Control Association.

From July, 2008 Associate Editor, Conference Editorial Board of the IEEE Control Systems Society.

I served as a reviewer for the following international journals:

Automatica

IEEE Transactions on Automatic Control

IEEE Transactions on Control Systems Technology

IEEE Control Systems Letters

International Journal of Robust and Nonlinear Control

Systems & Control Letters

International Journal of Control

Asian Journal of Control
IEEE Transactions on Mechatronics
IEEE Access
Journal of Optimization Theory and Applications
IEEE Transactions on Neural Networks and Learning Systems
Applied Mathematical Modelling
Computer Vision and Image Understanding
IEEE Signal Processing Letters
IEEE Transactions on Image Processing
IEE Proc. Vision, Image & Signal Processing
Image and Vision Computing
Journal of Neuroscience Methods
Materials & Design
Processes
Artificial Intelligence in Agriculture
Imaging Science Journal

I served as a reviewer for the following international conferences:

IEEE Conference on Decision and Control 2023
European Control Conference 2023
IFAC World Conference 2023
IFAC Symposium on Robust Control Design 2022
IFAC Symposium on Fault Detection, Supervision and Safety for Technical Processes 2022
American Control Conference 2021
European Control Conference 2020
International Conference on Mechatronics Technology 2019
IEEE Conference on Control Technology and Applications 2019
European Control Conference 2019
Indian Control Conference 2019
Joint IFAC Symposium on Robust Control Design and IFAC Workshop on Linear Parameter Varying Systems 2018
IEEE Conference on Decision and Control 2018

International Joint Conference on Artificial Intelligence and European Conference on Artificial Intelligence 2018
European Control Conference 2018
IEEE Conference on Decision and Control 2017
IFAC World Congress 2017
IEEE Multi-conference on Systems and Control 2016
IEEE Conference on Decision and Control 2016
Annual Conference of the IEEE Industrial Electronics Society 2016
American Control Conference 2016
American Control Conference 2015
IFAC Symposium on Robot Control 2015
IEEE Conference on Decision and Control 2015
IFAC Symposium on Robust Control Design 2015
IFAC Symposium on Robust Control Design 2012
IFAC Symposium on Fault Detection, Supervision and Safety for Technical Processes 2012
IFAC World Congress 2011
American Control Conference 2011
IEEE Conference on Decision and Control 2010
Mediterranean Conference on Control and Automation 2010
American Control Conference 2010
IEEE Conference on Decision and Control 2009
American Control Conference 2009
European Control Conference 2009
IEEE Conference on Decision and Control 2008
IFAC Word Congress 2008
American Control Conference 2008
International Conference on Machine Learning and Applications 2007
IEEE Multi-conference on Systems and Control 2007
IEEE Conference on Decision and Control and European Control Conference 2005
IEEE Conference on Decision and Control 2003

Technology Transfer Activities

Spin-off Company

I am co-founder of Glance Vision Technologies (GVT) Srl, spin-off of SISSA (International School for Advanced Studies, Trieste) founded in 2005. GVT is located in AREA Science Park, Trieste and operates in the field of machine vision, with applications to industrial robotics and pharmacy automation.

Patents

I am co-inventor of the Italian patents "Method and apparatus for recognition and counting of cells" and "Method for detection of pedestrian traffic":

Felice Andrea Pellegrino and Walter Vanzella. Procedimento per il riconoscimento ed il conteggio di particelle e relativa apparecchiatura, 0001390204, 2008,

Giovanni Longo, Felice Andrea Pellegrino, Cristian Giacomini, Gianfranco Fenu, and Andrea Assalone. Metodo per il rilevamento del traffico pedonale in uno spazio, 2018.

Courses Taught

2011: course on "Machine Learning techniques for industrial applications" (20 h) for Eidon-Kaires Srl, S.Giorgio di Nogaro (UD, Italy).

2009: course on "Neural Networks for industrial applications" (20 h) for Danieli Automation Spa, Buttrio (UD, Italy).

Awards

I was elevated to the grade of IEEE Senior member in April, 2023.

The paper

Gianfranco Fenu, Eric Medvet, Daniele Panfilo, and Felice Andrea Pellegrino. Mosaic Images Segmentation using U-net. In Maria De Marsico, Gabriella Sanniti di Baja, and Ana Fred, editors, *Proceedings of the 9th International Conference on Pattern Recognition Applications and Methods (ICPRAM 2020)*, pages 485–492, La Valletta, feb 2020. Scitepress.
doi:10.5220/0008967404850492

received the Best Poster Award.

The paper

Daniele Tognetto, Silvia Rinaldi, Claudia Papagno, Gianfranco Fenu, Felice Andrea Pellegrino, and Paolo Sirotti. Quality of Images With Premium IOLs. In *ASCRS Symposium on Cataract, IOL and Refractive Surgery*, Chicago, 2013

has been Best Paper of Session (PBOS) Winner 2012.

The paper

Lorenzo Dal Col and Felice Andrea Pellegrino. Fast and Accurate Object Detection by Means of Recursive Monomial Feature Elimination and Cascade of SVM. In M.P. Fanti and A. Giua, editors, *Proceedings of the IEEE Conference on Automation Science and Engineering, Trieste, Italy*, pages 304–309, Trieste, 2011.
doi:10.1109/CASE.2011.6042464

has been Finalist of the IEEE CASE Best Application Paper Award.

Publications

Journal Papers and Book Chapters

1. Franco Blanchini, Fabrizio Dabbene, Gianfranco Fenu, Felice Andrea Pellegrino, and Erica Salvato. Model-Free Feedback Control Synthesis From Expert Demonstration. *IEEE Control Systems Letters*, 7:1604–1609, 2023.
doi:10.1109/LCSYS.2023.3251575.
2. Marco Zullo, Vanja Macovaz, Giovanni Pinna, and Felice Andrea Pellegrino. An Artificial Intelligence System for Automatic Recognition of Punches in Fourteenth-Century Panel Painting. *IEEE Access*, 11(January):5864–5883, 2023.
doi:10.1109/ACCESS.2023.3236502.
3. Erica Salvato, Walter Vanzella, Gianfranco Fenu, and Felice Andrea Pellegrino. Singularity Avoidance for Cart-Mounted Hand-Guided Collaborative Robots: A Variational Approach. *Robotics*, 11(4), 2022.
doi:10.3390/robotics11040079.
4. Giorgia Nadizar, Eric Medvet, Ola Huse Ramstad, Stefano Nichele, Felice Andrea Pellegrino, and Marco Zullo. Merging pruning and neuroevolution: towards robust and efficient controllers for modular soft robots. *The Knowledge Engineering Review*, 37:e3, 2022.
doi:10.1017/S0269888921000151.
5. Alberto Presta, Felice Andrea Pellegrino, and Stefano Martellos. Learning-based automatic classification of lichens from images. *Biosystems Engineering*, 213:119–132, 2022.
doi:10.1016/j.biosystemseng.2021.11.023.
6. Erica Salvato, Gianfranco Fenu, Eric Medvet, and Felice Andrea Pellegrino. Crossing the Reality Gap: a Survey on Sim-to-Real Transferability of Robot Controllers in Reinforcement Learning. *IEEE Access*, 9:153171–153187, 2021.
doi:10.1109/access.2021.3126658.
7. Vittorio Casagrande, Gianfranco Fenu, Felice Andrea Pellegrino, Gilberto Pin, Erica Salvato, and Davide Zorzenon. Machine learning for computationally efficient electrical loads estimation in consumer washing machines. *Neural Computing and Applications*, 9, 2021.
doi:10.1007/s00521-021-06138-9.
8. Niky Bruchon, Gianfranco Fenu, Giulio Gaio, Simon Hirlander, Marco Lonza, Felice Andrea Pellegrino, and Erica Salvato. An Online Iterative Linear Quadratic Approach for a Satisfactory Working Point Attainment at FERMI. *Information*, 12(7), 2021.
doi:10.3390/info12070262.
9. Alessio Ansuini, Eric Medvet, Felice Andrea Pellegrino, and Marco Zullo. Investigating Similarity Metrics for Convolutional Neural Networks in the Case of Unstructured Pruning. In Maria De

- Marsico, Gabriella di Baja, and Ana Fred, editors, *Pattern Recognition Applications and Methods*, Lecture Notes in Computer Science, chapter 6, pages 87–111. Springer International Publishing, 2020.
10. Francesca Cairoli, Gianfranco Fenu, Felice Andrea Pellegrino, and Erica Salvato. Model Predictive Control of Glucose Concentration Based on Signal Temporal Logic Specifications with Unknown-Meals Occurrence. *Cybernetics and Systems*, 51(4):426–441, 2020.
doi:10.1080/01969722.2020.1758463.
 11. Niky Bruchon, Gianfranco Fenu, Giulio Gaio, Marco Lonza, Finn Henry O’Shea, Felice Andrea Pellegrino, and Erica Salvato. Basic Reinforcement Learning Techniques to Control the Intensity of a Seeded Free-Electron Laser. *Electronics*, 9(5), 2020.
doi:10.3390/electronics9050781.
 12. Carmen Del Vecchio, Gianfranco Fenu, Felice Andrea Pellegrino, Michele Di Foggia, Massimo Quattrale, Luca Benincasa, Stefania Iannuzzi, Alessandro Acernese, Pasquale Correra, and Luigi Glielmo. Support Vector Representation Machine for superalloy investment casting optimization. *Applied Mathematical Modelling*, 72C:324–336, 2019.
doi:10.1016/j.apm.2019.02.033.
 13. Daniele Tognetto, Alberto Armando Perrotta, Francesco Bauci, Silvia Rinaldi, Manlio Antonuccio, Felice Andrea Pellegrino, Gianfranco Fenu, George Stamatelatos, and Noel Alpíns. Quality of images with toric intraocular lenses. *Journal of Cataract & Refractive Surgery*, 44(3):376–381, 2018.
doi:10.1016/j.jcrs.2017.10.053.
 14. Niky Bruchon, Gianfranco Fenu, Giulio Gaio, Marco Lonza, Felice Andrea Pellegrino, and Lorenzo Saule. Free-electron laser spectrum evaluation and automatic optimization. *Nuclear Instruments and Methods in Physics Research Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, 871:20–29, 2017.
doi:10.1016/j.nima.2017.07.048.
 15. Franco Blanchini, Gianfranco Fenu, Giulia Giordano, and Felice Andrea Pellegrino. Model-Free Plant Tuning. *IEEE Transactions on Automatic Control*, 62(6):2623–2634, 2017.
doi:10.1109/TAC.2016.2616025.
 16. Daniele Casagrande, Gianfranco Fenu, and Felice Andrea Pellegrino. Hamiltonian path planning in constrained workspace. *European Journal of Control*, 33:1–10, 2017.
doi:http://dx.doi.org/10.1016/j.ejcon.2016.09.002.
 17. Franco Blanchini, Gianfranco Fenu, Giulia Giordano, and Felice Andrea Pellegrino. A convex programming approach to the inverse kinematics problem for manipulators under constraints. *European Journal of Control*, 33:11–23, 2017.
doi:http://dx.doi.org/10.1016/j.ejcon.2016.09.001.
 18. Franco Blanchini, Patrizio Colaneri, Yasumasa Fujisaki, Stefano Miani, and Felice Andrea Pellegrino. A Youla–Kučera parameterization approach to output feedback relatively optimal control. *Systems & Control Letters*, 81:14–23, 2015.
doi:10.1016/j.sysconle.2015.04.006.
 19. Sergio Carrato, Gianfranco Fenu, Eric Medvet, Enzo Mumolo, Felice Andrea Pellegrino, and Giovanni Ramponi. Towards More Natural Social Interactions of Visually Impaired Persons. In Sebastiano Battiato, Jacques Blanc-Talon, Giovanni Gallo, Wilfried Philips, Dan Popescu, and Paul Scheunders, editors, *Advanced Concepts for Intelligent Vision Systems SE - 63*, volume 9386 of *Lecture Notes in Computer Science*, pages 729–740. Springer International Publishing, 2015.
doi:10.1007/978-3-319-25903-1_63.

20. Gilberto Pin, Marco Filippo, Felice Andrea Pellegrino, Gianfranco Fenu, and Thomas Parisini. Approximate model predictive control laws for constrained nonlinear discrete-time systems: analysis and offline design. *International Journal of Control*, 86(5):804–820, 2013.
doi:10.1080/00207179.2012.762121.
21. Franco Blanchini, Felice Andrea Pellegrino, and Stefano Miani. Disturbance-driven model predictive control by means of Youla-Kučera parameter switching with an application to drainage canal control. *International Journal of Robust and Nonlinear Control*, 22(12):1362–1375, 2012.
doi:10.1002/rnc.2828.
22. Franco Blanchini, Thomas Parisini, Felice Andrea Pellegrino, and Gilberto Pin. High-Gain Adaptive Control: A Derivative-Based Approach. *IEEE Transactions on Automatic Control*, 54(9):2164–2169, sep 2009.
doi:10.1109/TAC.2009.2024379.
23. Franco Blanchini, Stefano Miani, Felice Andrea Pellegrino, and Bart Van Arkel. Enhancing Controller Performance for Robot Positioning in a Constrained Environment. *IEEE Transactions on Control Systems Technology*, 16(5):1066–1074, 2008.
doi:10.1109/TCST.2007.916324.
24. Franco Blanchini, Patrizio Colaneri, and Felice Andrea Pellegrino. Simultaneous performance achievement via compensator blending. *Automatica*, 44(1):1–14, jan 2008.
doi:10.1016/j.automatica.2007.04.010.
25. Franco Blanchini and Felice Andrea Pellegrino. Relatively Optimal Control: A Static Piecewise-Affine Solution. *SIAM Journal on Control and Optimization*, 46(2):585–603, 2007.
doi:10.1137/050643180.
26. P.F. Culverhouse, R. Williams, B. Simpson, C. Gallienne, B. Reguera, M. Cabrini, S. Fonda-Umani, Thomas Parisini, Felice Andrea Pellegrino, Y. Pazos, H. Wang, L. Escalera, A. Moroño, M. Hensey, J. Silke, A. Pellegrini, D. Thomas, D. James, M.A. Longa, S. Kennedy, and G. del Punta. HAB Buoy: a new instrument for in situ monitoring and early warning of harmful algal bloom events. *African Journal of Marine Science*, 28(2):245–250, 2006.
doi:10.2989/18142320609504156.
27. Franco Blanchini and Felice Andrea Pellegrino. Relatively Optimal Control With Characteristic Polynomial Assignment and Output Feedback. *IEEE Transactions on Automatic Control*, 51(2):183–191, 2006.
doi:10.1109/TAC.2005.863493.
28. Gian Luca Foresti and Felice Andrea Pellegrino. Automatic Visual Recognition of Deformable Objects for Grasping and Manipulation. *IEEE Transactions on Systems, Man and Cybernetics, Part C (Applications and Reviews)*, 34(3):325–333, aug 2004.
doi:10.1109/TSMCC.2003.819701.
29. Franco Blanchini, Felice Andrea Pellegrino, and Luca Visentini. Control of manipulators in a constrained workspace by means of linked invariant sets. *International Journal of Robust and Nonlinear Control*, 14(1314):1185–1205, sep 2004.
doi:10.1002/rnc.939.
30. Felice Andrea Pellegrino, Walter Vanzella, and Vincent Torre. Edge detection revisited. *IEEE Transactions on Systems, Man, and Cybernetics, Part B (Cybernetics)*, 34(3):1500–1518, jun 2004.
doi:10.1109/TSMCB.2004.824147.

31. Walter Vanzella, Felice Andrea Pellegrino, and Vincent Torre. Self-Adaptive Regularization. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, 26(6):804–809, jun 2004. doi:10.1109/TPAMI.2004.15.
32. Franco Blanchini, Stefano Miani, and Felice Andrea Pellegrino. Suboptimal Receding Horizon Control for Continuous-Time Systems. *IEEE Transactions on Automatic Control*, 48(6):1081–1086, 2003. doi:10.1109/TAC.2003.813145.
33. Franco Blanchini and Felice Andrea Pellegrino. Relatively Optimal Control and Its Linear Implementation. *IEEE Transactions on Automatic Control*, 48(12):2151–2162, 2003. doi:10.1109/TAC.2003.820070.

Conference Papers

1. Felice Andrea Pellegrino, Franco Blanchini, Gianfranco Fenu, and Erica Salvato. Closed-loop Control from Data-Driven Open-Loop Optimal Control Trajectories. In Alessandro Astolfi and Thomas Parisini, editors, *2022 European Control Conference (ECC)*, volume 1, pages 1379–1384, London, jul 2022. EUCA. doi:10.23919/ECC55457.2022.9838344.
2. Benedetta Liberatori, Ciro Antonio Mami, Giovanni Santacatterina, Marco Zullo, and Felice Andrea Pellegrino. YOLO-Based Face Mask Detection on Low-End Devices Using Pruning and Quantization. In Karolj Skala, editor, *2022 45th International Convention on Information, Communication and Electronic Technology (MIPRO)*, pages 900–905, Opatija, may 2022. Croatian Society MIPRO. doi:10.23919/MIPRO55190.2022.9803406.
3. Erica Salvato, Gianfranco Fenu, Eric Medvet, and Felice Andrea Pellegrino. Characterization of Modeling Errors Affecting Performances of a Robotics Deep Reinforcement Learning Controller in a Sim-to-Real Transfer. In *2021 44th International Convention on Information, Communication and Electronic Technology (MIPRO)*, number 1, pages 1154–1159. Croatian Society MIPRO, 2021. doi:10.23919/MIPRO52101.2021.9596864.
4. Giorgia Nadizar, Eric Medvet, Ola Huse Ramstad, Stefano Nichele, Felice Andrea Pellegrino, and Marco Zullo. Merging pruning and neuroevolution: towards robust and efficient controllers for modular soft robots. *The Knowledge Engineering Review*, 37:e3, 2022. doi:10.1017/S0269888921000151.
5. Marco Zullo, Eric Medvet, Felice Andrea Pellegrino, and Alessio Ansuini. Speeding-up pruning for Artificial Neural Networks: Introducing Accelerated Iterative Magnitude Pruning. In Rita Cucchiara, Alberto Del Bimbo, and Stan Sclaroff, editors, *2020 25th International Conference on Pattern Recognition (ICPR)*, pages 3868–3875, Milan, jan 2021. IEEE. doi:10.1109/icpr48806.2021.9412705.
6. Felice Andrea Pellegrino and Walter Vanzella. Virtual Redundancy and Barrier Functions for Collision Avoidance in Robotic Manufacturing. In Josef Jablonsky, Michel Fliess, and Enrique H. Viedma, editors, *2020 7th International Conference on Control, Decision and Information Technologies (CoDIT)*, volume 1, pages 957–962, Prague, jun 2020. IEEE. doi:10.1109/CoDIT49905.2020.9263936.
7. Gianfranco Fenu, Eric Medvet, Daniele Panfilo, and Felice Andrea Pellegrino. Mosaic Images Segmentation using U-net. In Maria De Marsico, Gabriella Sanniti di Baja, and Ana Fred, editors, *Proceedings of the 9th International Conference on Pattern Recognition Applications and Methods (ICPRAM 2020)*, pages 485–492, La Valletta, feb 2020. Scitepress. doi:10.5220/0008967404850492.

8. Alessio Ansuini, Eric Medvet, Felice Andrea Pellegrino, and Marco Zullich. On the Similarity between Hidden Layers of Pruned and Unpruned Convolutional Neural Networks. In Maria De Marsico, Gabriella Sanniti di Baja, and Ana Fred, editors, *Proceedings of the 9th International Conference on Pattern Recognition Applications and Methods (ICPRAM 2020)*, pages 52–59, La Valletta, feb 2020. Scitepress.
doi:10.5220/0008960300520059.
9. Alexander Babichev, Vittorio Casagrande, Luca Della Schiava, Gianfranco Fenu, Imola Fodor, Enrico Marson, Felice Andrea Pellegrino, Gilberto Pin, Erica Salvato, Michele Toppano, and Davide Zorzenon. Loads Estimation using Deep Learning Techniques in Consumer Washing Machines. In Maria De Marsico, Gabriella Sanniti di Baja, and Ana Fred, editors, *Proceedings of the 9th International Conference on Pattern Recognition Applications and Methods*, pages 425–432, La Valletta, feb 2020. SCITEPRESS - Science and Technology Publications.
doi:10.5220/0008935104250432.
10. Niky Bruchon, Gianfranco Fenu, Giulio Gaio, Marco Lonza, Felice Andrea Pellegrino, and Erica Salvato. Toward the Application of Reinforcement Learning to the Intensity Control of a Seeded Free-Electron Laser. In Adolfo Senatore and Truong Q. Dinh, editors, *2019 23rd International Conference on Mechatronics Technology (ICMT)*, pages 1–6, Salerno, oct 2019. IEEE.
doi:10.1109/ICMECT.2019.8932150.
11. Antonio Acernese, Carmen Del Vecchio, Gianfranco Fenu, Luigi Glielmo, and Felice Andrea Pellegrino. A Combined Support Vector Machine and Support Vector Representation Machine Method for Production Control. In *2019 18th European Control Conference (ECC)*, pages 512–517, Naples, jun 2019. EUCA.
doi:10.23919/ECC.2019.8796111.
12. Francesca Cairoli, Gianfranco Fenu, Felice Andrea Pellegrino, and Erica Salvato. Model Predictive Control of glucose concentration based on Signal Temporal Logic specifications. In *2019 6th International Conference on Control, Decision and Information Technologies (CoDIT)*, pages 714–719, Paris, apr 2019. IEEE.
doi:10.1109/CoDIT.2019.8820492.
13. Francesca Cairoli, Gianfranco Fenu, and Felice Andrea Pellegrino. Clinical Decision Support Using Colored Petri Nets: a Case Study on Cancer Infusion Therapy. In *2019 6th International Conference on Control, Decision and Information Technologies (CoDIT)*, pages 314–319, Paris, apr 2019. IEEE.
doi:10.1109/CoDIT.2019.8820456.
14. Valentino Cucit, Fabio Burlon, Gianfranco Fenu, Riccardo Furlanetto, Valentino Cucit, Felice Andrea Pellegrino, and Michele Simonato. A control system for preventing cavitation of centrifugal pumps. *Energy Procedia*, 148(Ati):242–249, 2018.
doi:10.1016/j.egypro.2018.08.074.
15. Franco Blanchini, Gianfranco Fenu, Giulia Giordano, and Felice Andrea Pellegrino. Model-free tuning of plants with parasitic dynamics. In *2017 56th IEEE Conference on Decision and Control (CDC)*, pages 499–504, Melbourne, 2017. IEEE.
doi:10.1109/CDC.2017.8263713
16. Franco Blanchini, Gianfranco Fenu, Giulia Giordano, and Felice Andrea Pellegrino. A convex programming approach to the inverse kinematics problem for manipulators under constraints. *European Journal of Control*, 33:11–23, 2017.
doi:http://dx.doi.org/10.1016/j.ejcon.2016.09.001.

17. Alberto Bartoli, Gianfranco Fenu, Eric Medvet, Felice Andrea Pellegrino, and Nicola Timeus. Segmentation of Mosaic Images Based on Deformable Models Using Genetic Algorithms. In Ombretta Gaggi, Pietro Manzoni, Claudio Palazzi, Armir Bujari, and Johann M Marquez-Barja, editors, *Smart Objects and Technologies for Social Good: Second International Conference, GOODTECHS 2016 Proceedings*, Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering, pages 233–242, Venice, 2017. Springer International Publishing. doi:10.1007/978-3-319-61949-1_25.
18. Marco De Marco, Gianfranco Fenu, Eric Medvet, and Felice Andrea Pellegrino. Computer Vision for the Blind: A Comparison of Face Detectors in a Relevant Scenario. In Ombretta Gaggi, Pietro Manzoni, Claudio Palazzi, Armir Bujari, and Johann M Marquez-Barja, editors, *Smart Objects and Technologies for Social Good: Second International Conference, GOODTECHS 2016, Venice, Italy, November 30 – December 1, 2016, Proceedings*, Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering, pages 145–154, Venice, 2017. Springer International Publishing. doi:10.1007/978-3-319-61949-1_16.
19. Sergio Carrato, Stefano Marsi, Eric Medvet, Felice Andrea Pellegrino, Giovanni Ramponi, and Michele Vittori. Computer Vision for the blind: a dataset for experiments on face detection and recognition. In *Proceedings of the 39th International Convention on Information and Communication Technology, Electronics and Microelectronics*, pages 1479–1484, Opatija, 2016. Mipro Croatian Society. doi:10.1109/MIPRO.2016.7522323.
20. Franco Blanchini, Gianfranco Fenu, Giulia Giordano, and Felice Andrea Pellegrino. Plant tuning: A robust Lyapunov approach. In *Decision and Control (CDC), 2015 IEEE 54th Annual Conference on*, pages 1142–1147, Osaka, 2015. IEEE. doi:10.1109/CDC.2015.7402365.
21. Margherita Bonetto, Sergio Carrato, Gianfranco Fenu, Eric Medvet, Enzo Mumolo, Felice Andrea Pellegrino, and Giovanni Ramponi. Image Processing Issues in a Social Assistive System for the Blind. In *Image and Signal Processing and Analysis (ISPA), 2015 9th International Symposium on*, pages 216–221, Zagreb, 2015. doi:10.1109/ISPA.2015.7306061.
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