Felice Andrea Pellegrino
Associate Professor

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Personal

Born on September 6, 1974.

Italian Citizen.

Academic Positions

11/2017–present: **Associate Professor in Systems and Control Engineering**, Department of Engineering and Architecture, University of Trieste, Trieste (Italy).

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).

Academic Qualifications

11/2025: National Scientific qualification as **full professor** in the Italian higher education system, in the call 2023/2025 (Ministerial Decree n. 1796/2023) for the disciplinary field of **09/G1 - Systems and control engineering**.

Fields of Research Interests

Control Theory, Computer Vision, Machine Learning, Robotics.

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.

Academic Services

2021-present: Member, Doctoral Committee, PhD Program in Applied Data Science and Artificial Intelligence, University of Trieste.

2011-2021: Member, Doctoral Committee, PhD Program in Computer Engineering, University of Trieste.

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

[Principal Investigator] European Social Fund Plus 2021/2027, Differentiable rendering for robotics, with applications to smart manufacturing.

[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 nonlinear 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 more than €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 International Conference on Control, Decision and Information Technologies (CoDIT), Split, July 2025.

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, 8^{th} International Symposium on Image and Signal Processing and Analysis, Trieste (Italy), 2013.

Editorial Activities

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
- Engineering Applications of Artificial Intelligence

I served as a reviewer for the following international conferences:

- European Control Conference 2025
- International Conference on Control, Decision and Information Technologies 2025
- World Conference on eXplainable Artificial Intelligence 2024

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 four patents:

Andrea Petronio, Matteo Formigli, Walter Vanzella, Milos Ajcevic, Agostino Accardo, Gianfranco Fenu, Felice Andrea Pellegrino, Eric Medvet, Giovanni Furlanis, and Paolo Manganotti. Wearable apparatusfor analyzing movements of a person and method thereof, WO2023139567A1, 2023,

Felice Andrea Pellegrino and Walter Vanzella. Apparatus and method for programming robots by demonstration, US20250001588A1, 2022,

Giovanni Longo, Felice Andrea Pellegrino, Cristian Giacomini, Gianfranco Fenu, and Andrea Assalone. Metodo per il rilevamento del traffico pedonale in uno spazio, 102015000088749, 2018 *("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 *("Method and apparatus for recognition and counting of cells")*.

Courses Taught

2011: course on "Machine Learning techniques for industrial applications" (20 h) for Eidon-Kaires Srl, San 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. Erica Salvato, Franco Blanchini, Gianfranco Fenu, Giulia Giordano, and Felice Andrea Pellegrino. Position-based visual servo control without hand-eye calibration. *Robotics and Autonomous Systems*, 2025.
   doi:https://doi.org/10.1016/j.robot.2025.105045.

2. Erica Salvato, Franco Blanchini, Gianfranco Fenu, Giulia Giordano, and Felice Andrea Pellegrino. Model-free kinematic control for robotic systems. *Automatica*, 173:112030, 2025. doi:https://doi.org/10.1016/j.automatica.2024.112030.

3. Felice Andrea Pellegrino, Franco Blanchini, Gianfranco Fenu, and Erica Salvato. Data-driven dynamic relatively optimal control. *European Journal of Control*, 74:100839, 2023. 2023 European Control Conference Special Issue. doi:https://doi.org/10.1016/j.ejcon.2023.100839.

4. 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.

5. Marco Zullich, 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.

6. 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.

7. Giorgia Nadizar, Eric Medvet, Ola Huse Ramstad, Stefano Nichele, Felice Andrea Pellegrino, and Marco Zullich. Merging pruning and neuroevolution: towards robust and efficient controllers for modular soft robots. *The Knowledge Engineering Review*, 37:e3, 2022. doi:10.1017/S0269888921000151.

8. 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.

9. 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.

10. 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.

11. 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.

12. Alessio Ansuini, Eric Medvet, Felice Andrea Pellegrino, and Marco Zullich. 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.

13. 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.

14. 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.

15. Carmen Del Vecchio, Gianfranco Fenu, Felice Andrea Pellegrino, Michele Di Foggia, Massimo Quatrale, 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.

16. Daniele Tognetto, Alberto Armando Perrotta, Francesco Bauci, Silvia Rinaldi, Manlio Antonuccio, Felice Andrea Pellegrino, Gianfranco Fenu, George Stamatelatos, and Noel Alpins. Quality of images with toric intraocular lenses. *Journal of Cartaract & Refractive Surgery*, 44(3):376–381, 2018. doi:10.1016/j.jcrs.2017.10.053.

17. 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.

18. 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.

19. 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.

20. 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.

21. 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.

22. 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.

23. 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.

24. 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.

25. 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.

26. 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.

27. 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.

28. 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.

29. 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.

30. 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.

31. 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.

32. 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.

33. 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.

34. 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.

35. 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.

36. 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. Erica Salvato, Gianfranco Fenu, Felice Andrea Pellegrino, and Thomas Parisini. An active disturbance rejection model predictive controller for constrained over-actuated systems. In *2024 European Control Conference (ECC)*, pages 2547–2552, 2024. doi:10.23919/ECC64448.2024.10591187.

2. Juan Marcelo Castellino, Francesco Forte, Gianfranco Fenu, and Felice Andrea Pellegrino. Model predictive control for temperature regulation of professional ovens. In *2023 9th International Conference on Control, Decision and Information Technologies (CoDIT)*, pages 214–219, Rome, jul 2023. IEEE. doi:10.1109/CoDIT58514.2023.10284253.

3. Leonardo Arrighi, Sylvio Barbon Junior, Felice Andrea Pellegrino, Michele Simonato, and Marco Zullich. Explainable Automated Anomaly Recognition in Failure Analysis: is Deep Learning Doing it Correctly? In Luca Longo, editor, *Explainable Artificial Intelligence*, pages 420–432, Cham, 2023. Springer Nature Switzerland. doi:10.1007/978-3-031-44067-0_22.

4. 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.

5. Benedetta Liberatori, Ciro Antonio Mami, Giovanni Santacatterina, Marco Zullich, 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.

6. 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.

7. Giorgia Nadizar, Eric Medvet, Ola Huse Ramstad, Stefano Nichele, Felice Andrea Pellegrino, and Marco Zullich. Merging pruning and neuroevolution: towards robust and efficient controllers for modular soft robots. *The Knowledge Engineering Review*, 37:e3, 2022. doi:10.1017/S0269888921000151.

8. Marco Zullich, 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.

9. 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.

10. 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.

11. 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.

12. 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.

13. 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.

14. 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.

15. 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.

16. 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.

17. 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.

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