



Andrea Monteriù

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Department of Information Engineering
Università Politecnica delle Marche

● WORK EXPERIENCE

15/12/2018 – CURRENT – Ancona, Italy

ASSOCIATE PROFESSOR OF AUTOMATIC CONTROL – DEPARTMENT OF INFORMATION, UNIVERSITÀ POLITECNICA DELLE MARCHE

27/06/2018 – CURRENT

FOUNDER AND CEO OF THE UNIVERSITY SPIN-OFF "SYNCODE SCARL"

01/11/2015 – 14/12/2018 – Ancona, Italy

ASSISTANT PROFESSOR – DEPARTMENT OF INFORMATION, UNIVERSITÀ POLITECNICA DELLE MARCHE

27/09/2010 – 14/12/2018 – Ancona, Italy

ADJUNCT PROFESSOR – DEPARTMENT OF INFORMATION, UNIVERSITÀ POLITECNICA DELLE MARCHE

"*Fundamentals of Control Theory*" BSc Degree in Management Engineering

"*Industrial Automation Technologies*" MSc Degree in Management Engineering

"*Automation and Robotics Technologies*" MSc Degree in Automation and Computer Science Engineering and in Mechanical Engineering

01/06/2007 – 30/10/2015 – Ancona, Italy

RESEARCH FELLOW – DEPARTMENT OF INFORMATION, UNIVERSITÀ POLITECNICA DELLE MARCHE

25/09/2006 – 24/09/2010 – Ancona, Italy

TEACHING ASSISTANT – DEPARTMENT OF INFORMATION, UNIVERSITÀ POLITECNICA DELLE MARCHE

05/01/2005 – 01/10/2005 – Tampa, FL, United States

VISITING RESEARCHER – CENTER FOR ROBOT ASSISTED SEARCH & RESCUE (CRASAR), UNIVERSITY OF SOUTH FLORIDA

● EDUCATION AND TRAINING

15/12/2006 – Ancona, Italy

PHD IN ARTIFICIAL INTELLIGENT SYSTEMS – Department of Computer, Management and Automation engineering, Università Politecnica delle Marche

Thesis title "Model-Based Fault Diagnosis for Mobile Robotic Systems" under the supervision of Prof. Sauro

Longhi 23/11/2003 – Ancona, Italy

ENGINEER LICENCE – Università Politecnica delle Marche

Thesis title "Fault-tolerant methods for sensor fusion", developed during the "Socrates Erasmus Programme" at the Automation Department of Technical University of Denmark, DTU, Lyngby, Denmark under the scientific supervision of Prof. Mogens Blanke

● RESEARCH INTERESTS

In brief

The research interests concern the field of systems theory and control, mainly focused on fault diagnosis, fault management, fault tolerant and control, non-linear control, regulation and tracking, nonlinear dynamical systems and applications to robotic and marine systems, service robotics for assistive and rehabilitation applications. Currently, it is part of several research projects funded by research institutions and companies, centered on fault diagnosis.

Research fields

- FaultDiagnosis
- Fault Detection and Isolation
- Fault and Failure Tolerant Control
- Fault Handling
- Systems and Control Theory
- Nonlinear Dynamics and Control
- Periodic Systems
- Stochastic Systems
- Guidance and Control of Autonomous Systems
- Robotics
- Mobile Robotics and Manipulators
- Rehabilitative and Assistive Robotics
- Health Technologies
- Assistive Home Automation

● TEACHING ACTIVITIES

2019 – 2021

Professor

"*Fundamentals of Control Theory*" BSc Degree in Management Engineering, Università Politecnica delle Marche, Ancona, Italy

"*Control Techniques for Bioengineering*" MSc Degree in Biomedical Engineering, Università Politecnica delle Marche, Ancona, Italy

2017 – 2019

Professor

"*Fundamentals of Control Theory*" BSc Degree in Management Engineering, Università Politecnica delle Marche, Ancona, Italy

2014 – 2017

Adjunct Professor

"*Fundamentals of Control Theory*" BSc Degree in Management Engineering, Università Politecnica delle Marche, Ancona, Italy

2012 – 2014

Adjunct Professor

"*Automation and Robotics Technologies*" MSc Degree in Automation and Computer Science Engineering and in Mechanical Engineering, Università Politecnica delle Marche, Ancona, Italy

2012

Invited Speaker

"Automation at the service of mankind", European Project COMENIUS Multilater School Partnership NIF (New Ideas Factory), Istituto Volterra, Ancona, Italy

2006 – 2011

Teaching Assistant

"Fault Diagnosis in Sensor Fusion" MSc Degree in Automation and Computer Science Engineering, Università Politecnica delle Marche, Ancona, Italy

2010 – 2011

Adjunct Professor

"Automation and Robotics Technologies" MSc Degree in Automation and Computer Science Engineering and in Mechanical Engineering, Università Politecnica delle Marche, Ancona, Italy

2009 – 2010

Teaching Assistant

"Automatic Control" MSc Degree in Automation and Computer Science Engineering, Università Politecnica delle Marche, Ancona, Italy

2008 – 2010

Teaching Assistant

"Development of Control Systems" MSc Degree in Automation and Computer Science Engineering, Università Politecnica delle Marche, Ancona, Italy

2006 – 2009

Teaching Assistant

"Automatic Control" MSc Degree in Automation and Computer Science Engineering, Università Politecnica delle Marche, Ancona, Italy

"Modelling and Identification of Dynamic Processes" MSc Degree in Automation and Computer Science Engineering, Università Politecnica delle Marche, Ancona, Italy

2005 – 2006

Teaching Assistant

"Modelling and Identification of Dynamic Processes" MSc Degree in Automation and Computer Science Engineering, Università Politecnica delle Marche, Ancona, Italy

"Industrial Automation" MSc Degree in Automation and Computer Science Engineering, Università Politecnica delle Marche, Ancona, Italy

"Automation Systems" MSc Degree in Automation and Computer Science Engineering, Università Politecnica delle Marche, Ancona, Italy

2005

Seminar

"Fault Diagnosis for Mobile Robotic Systems: an introductory course" MSc in Computer Science and in Computer Engineering, Department of Computer Science and Engineering, University of South Florida, Florida, USA

● COMMITTEES

2021 – 2023

Chair of IEEE CTSoc TC on Consumer Systems for Healthcare and Wellbeing (2021-2023)

IEEE Consumer Technology Society Technical Committee on Consumer Systems for Healthcare and Wellbeing (CSH)

2020 – 2024

Vice-Chair of IFAC Technical Committee 7.2 in Marine Systems (2020-2024)

Vice-Chair, IFAC Technical Committee TC 7.2 in Marine Systems (panel "Marine Systems on Social Media")

2019

Vice-Chair of the IEEE Italy Section CESoc Chapter (2019)

Vice-Chair of the IEEE Italy Section Consumer Electronics Society Chapter

21/11/2019 – 22/11/2019

Tutorial/Workshop Chair of the ICUAS 2019

Tutorial/Workshop Chair of the 2019 International Conference on Unmanned Aircraft Systems (ICUAS 2019), Atlanta, Georgia, USA, November 21-22, 2019

19/06/2019 – 21/06/2019

Program Chair of the ISCT 2019

Program Chair of the IEEE International Symposium on Consumer Technology (ISCT2019), Ancona, Italy, June 19-21, 2019

15/06/2021 – 18/06/2021

Program Chair of the ICUAS 2021

Program Chair of the 2021 International Conference on Unmanned Aircraft Systems (ICUAS 2021), Athens, Greece, June 15-18, 2021

11/06/2019 – 14/06/2019

International Program Committee Member of ACD 2019

International Program Committee Member of the 15th European Workshop on Advanced Control and Diagnosis (ACD 2019), Bologna, Italy, June 11-14, 2019

2018 – 2020

Vice-Chair of IFAC Technical Committee 7.2 in Marine Systems (2018-2020)

Vice-Chair, IFAC Technical Committee TC 7.2 in Marine Systems (panel "Marine Systems on Social Media")

02/07/2018 – 04/07/2018

Symposium Chair in MESA 2018

Chair of the Symposium "Diagnosis and Monitoring in Mechatronic Systems" of the 14th IEEE/ASME International Conference on Mechatronic and Embedded Systems and Applications (MESA 2018), Oulu, Finland, July 2-4, 2018

03/07/2018 – 04/07/2018

Scientific Committee Member of the ForItAAL2018

Scientific Committee Member of the 9th Italian Forum on Ambient Assisted Living, Lecce, Italy, July 3-4, 2018

19/06/2018 – 22/06/2018

International Program Committee Member of the MED 2018

International Program Committee Member of the 26th Mediterranean Conference on Control and Automation (MED 2018), Zadar, Croatia, June 19-22, 2018

12/06/2018 – 15/06/2018

International Program Committee Member of the ICUAS 2018

International Program Committee Member of the 2018 International Conference on Unmanned Aircraft Systems (ICUAS 2018), Dallas, Texas, USA, June 12-15, 2018

2018

Vice-Chair of the IEEE Italy Section CESoc Chapter (2018)

Vice-Chair of the IEEE Italy Section Consumer Electronics Society Chapter

2017

Secretary of the IEEE Italy Section CESoc Chapter (2017)

Secretary of the IEEE Italy Section Consumer Electronics Society Chapter

06/09/2017 – 08/09/2018

International Program Committee Member of the ECMR 2017

International Program Committee Member of the European Conference on Mobile Robotics (ECMR 2017), Paris, France, September 6-8, 2017

06/08/2017 – 09/08/2017

Symposium Chair in MESA 2017

Chair of the Symposium "Diagnosis and Monitoring in Mechatronic Systems" of the 13rd IEEE/ASME International Conference on Mechatronic and Embedded Systems and Applications (MESA 2017), Cleveland, Ohio, USA, August 6-9, 2017

Scientific Committee Member of the ForItAAL2017

Scientific Committee Member of the 8th Italian Forum on Ambient Assisted Living, Genova, Italy, June 12-15, 2017

29/08/2016 – 31/08/2016

Symposium Chair in MESA 2016

Chair of the Symposium "Diagnosis and Monitoring in Mechatronic Systems" of the 12th IEEE/ASME International Conference on Mechatronic and Embedded Systems and Applications (MESA 2016), Auckland, New Zealand, August 29-31, 2016

20/06/2016 – 23/06/2016

Scientific Committee Member of the ForItAAL2016

Scientific Committee Member of the 8th Italian Forum on Ambient Assisted Living, Pisa, Italy, June 20-23, 2016

12/09/2015 – 15/09/2015

Organizing Program Committee Member of the XXVI Congreso de ALASS

Organizing Program Committee Member of the XXVI Congreso de ALASS, Ancona, Italy, September 12-15, 2015

10/09/2014 – 12/09/2014

Symposium Chair in MESA 2014

Chair of the Symposium "Diagnosis and Monitoring in Mechatronic Systems" of the 10th IEEE/ASME International Conference on Mechatronic and Embedded Systems and Applications (MESA 2014), Senigallia, Ancona, Italy, September 10-12, 2014

02/09/2014 – 05/09/2014

Program Committee Member of the ForItAAL2014

Program Committee Member of the 5th Italian Forum on Ambient Assisted Living, Catania, Italy, September 2–5, 2014

23/10/2013 – 25/10/2013

Vice-Chair of the ForItAAL2013

Vice-Chair of the 4th Italian Forum on Ambient Assisted Living, Ancona, Italy, October 23–25, 2013

19/09/2007 – 21/09/2007

Poster Session Organizer of the CAMS 2007

Organizer of the Poster Session on "Collaborative activities in marine systems around the Adriatic region" of the IFAC Conference on Control Applications in Marine Systems (CAMS 2007), Bol, Croatia, September 19–21, 2007

07/07/2004 – 09/07/2004

Organizing Committee Member of the CAMS 2004

Member of the "Organizing Committee" of the IFAC Conference on Control Applications in Marine Systems, Ancona, Italy, July 7–9, 2004

● **PUBLICATIONS**

BOOKS

[B11] A. Monteriù, A. Freddi, and S. Longhi, editors. Ambient Assisted Living: Italian Forum 2019. Springer International Publishing, 2019. doi: 10.1007/978-3-030-63107-9

[B10] S. Longhi, A. Monteriù, and A. Freddi, editors. Fault Diagnosis and Fault-Tolerant Control of Robotic and Autonomous Systems. Institution of Engineering and Technology, London, 2020. doi: 10.1049/PBCE126E

[B9] C. Casiddu, N. and Porfirone, A. Monteriù, and F. Cavallo, editors. Ambient Assisted Living: Italian Forum 2017. Springer International Publishing, 2018. doi: 10.1007/978-3-030-04672-9

[B8] Longhi, S., Monteriù, A., Freddi, A., Bettin, G., Cardinali, S., Chiacchi, M.S., and Gallegati, M., editors. The First Outstanding 50 Years of "Università Politecnica delle Marche" - Research Achievements in Social Sciences and Humanities. Springer International Publishing, 2020. doi: 10.1007/978-3-030-33879-4

[B7] Longhi, S., Monteriù, A., Freddi, A., Frontoni, E., Germani, M., and Revel, G.M., editors. The First Outstanding 50 Years of "Università Politecnica delle Marche" - Research Achievements in Physical Sciences and Engineering. Springer International Publishing, 2020. doi: 10.1007/978-3-030-32762-0

[B6] Longhi, S., Monteriù, A., Freddi, A., Aquilanti, L., Ceravolo, M.G., Carnevali, O., Giordano, M., and Longhi, S., editors. The First Outstanding 50 Years of "Università Politecnica delle Marche" - Research Achievements in Life Sciences. Springer International Publishing, 2020. doi: 10.1007/978-3-030-33832-9

[B5] S. Longhi, A. Monteriù and A. Freddi, editors. Human Monitoring, Smart Health and Assisted Living: Techniques and technologies. IET Institution of Engineering and Technology, 2017. doi: 10.1049/PBHE009E

[B4] F. Cavallo, V. Marletta, A. Monteriù and P. Siciliano, editors. *Ambient Assisted Living: Italian Forum 2016*. Springer International Publishing, 2017. doi: 10.1007/978-3-319-54283-6

[B3] B. Andò, P. Siciliano, V. Marletta, and A. Monteriù, editors. *Ambient Assisted Living: Italian Forum 2014*. Springer International Publishing, 2015. doi: 10.1007/978-3-319-18374-9

[B2] A. Monteriù. *Fault Detection and Isolation for Multi-Sensor Navigation Systems*. Lambert Academic Publishing, 2014. doi: 10.13140/RG.2.1.4363.6320

[B1] S. Longhi, P. Siciliano, M. Germani, and A. Monteriù, editors. *Ambient Assisted Living: Italian Forum 2013*. Springer International Publishing, 2014. doi: 10.1007/978-3-319-01119-6

CHAPTERS

[Ch28] Vesperini F., Romeo L., Principi E., Monteriù A., Squartini S. (2020) Convolutional Recurrent Neural Networks and Acoustic Data Augmentation for Snore Detection. In: Esposito A., Faundez-Zanuy M., Morabito F., Pasero E. (eds) *Neural Approaches to Dynamics of Signal Exchanges. Smart Innovation, Systems and Technologies*, vol 151. Springer, Singapore. https://doi.org/10.1007/978-981-13-8950-4_4

[Ch27] R. Pierdicca, M. Prist, A. Monteriù, E. Frontoni, F. Ciarapica, M. Bevilacqua, and G. Mazzuto, "Augmented reality smart glasses in the work-place: Safety and security in the fourth industrial revolution era," *Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*, vol. 12243 LNCS, pp. 231–247, 2020, cited By 1. doi: 10.1007/978-3-030-58468-9_18

[Ch26] A. Baldini, R. Felicetti, A. Freddi, K. Hasegawa, A. Monteriù, and J. Pandey, "Actuator fault tolerance for a WAM-V catamaran with azimuth thrusters," in *Fault Diagnosis and Fault-Tolerant Control of Robotic and Autonomous Systems*, IET (UK), Jun. 2020, pp. 93–115, ISBN: 978-1-78561-830-7, e-ISBN: 978-1-78561-831-4

[Ch25] P. Cicconi, E. Pallotta, A. Russo, R. Raffaelli, M. Prist, A. Monteriù, S. Longhi, and M. Germani, "A Model-Based Approach to Support the Design of Mold Heating for Composites," In: Cavas-Martínez F., Eynard B., Fernández Cañavate F., Fernández-Pacheco D., Morer P., Nigrelli V. (eds) *Advances on Mechanics, Design Engineering and Manufacturing II*. *Lecture Notes in Mechanical Engineering*. Springer, Cham. doi: 10.1007/978-3-030-12346-8_38

[Ch24] A. Bonci, G. Conte, M. L. Corradini, A. Freddi, L. Ietto, G. Ippoliti, S. Longhi, A. Monteriù, G. Orlando, V. Orsini, A. M. Perdon, D. Scaradozzi, S. M. Zanolì, "From the control systems theory to intelligent manufacturing and services: Challenges and future perspectives," in *The First Outstanding 50 Years of "Università Politecnica delle Marche"*. Springer, Cham (Switzerland), Dec. 2019, pp. 73–99, ISBN: 978-3-030-32761-3, e-ISBN: 978-3-030-32762-0

[Ch23] F. Pietroni, S. Casaccia, G. Revel, M. Prist, A. Monteriù, S. Longhi, and L. Scalise, "Smart monitoring of user and home environment: The health@home acquisition framework," *Lecture Notes in Electrical Engineering*, vol. 540, pp. 23–37, 2019, cited By 3. doi: 10.1007/978-3-030-04672-9_2

[Ch22] L. Ciuccarelli, A. Freddi, S. Iarlori, S. Longhi, A. Monteriù, D. Ortenzi, and D. P. Pagnotta, "Architecture for Cooperative Interacting Robotic Systems Towards Assisted Living: A Preliminary Study," In: Leone A., Caroppo A., Rescio G., Diraco G., Siciliano P. (eds) *Ambient Assisted Living. ForItAAL 2018*. *Lecture Notes in Electrical Engineering*. Springer, Cham (Switzerland), Feb. 2019, vol. 544, pp. 471–486, ISBN: 978-3-030-05920-0, e-ISBN: 978-3-030-05921-7, ISSN: 1876-1100, e-ISSN: 1876-1119. doi: 10.1007/978-3-030-05921-7_38

[Ch21] Paola Pierleoni, Alberto Belli, Roberto Concetti, Lorenzo Palma, Federica Pinti, Sara Raggiunto, Simone Valenti, and Andrea Monteriù, "A Non-invasive Method for Biological Age Estimation Using Frailty Phenotype Assessment". In: Leone A., Caroppo A., Rescio G., Diraco G., Siciliano P. (eds) *Ambient Assisted Living. ForItAAL 2018*. *Lecture Notes in Electrical Engineering*, vol 544. Springer, Cham. doi: 10.1007/978-3-030-05921-7_7

[Ch20] G. Foresi, A. Freddi, S. Iarlori, S. Longhi, A. Monteriù, D. Ortenzi, and D. P. Pagnotta, "Human-Robot Cooperation via Brain Computer Interface in Assistive Scenario," in ser. *Lecture Notes in Electrical Engineering, Ambient Assisted Living: Italian Forum 2017*. Springer International Publishing (Switzerland), Feb. 2019, vol. 540, pp. 115–131, ISBN: 978-3-030-04671-2, e-ISBN: 978-3-030-04672-9, ISSN: 1876-1100. doi: 10.1007/978-3-030-04672-9_8

[Ch19] A. Baldini, L. Ciabattini, A.A. Dyda, R. Felicetti, F. Ferracuti, A. Freddi, A. Monteriù, and D. Oskin, "Variable Structure Control via Coupled Surfaces for Control Effort Reduction in Remotely Operated Vehicles," in *Offshore Mechatronics Systems Engineering*. Taylor & Francis Group (England), Jul. 2018, pp. 162–183, e-ISBN: 978-1-351-73392-2

- [Ch18] Alessandro Baldini, Lucio Ciabattoni, Riccardo Felicetti, Francesco Ferracuti, Alessandro Freddi, Andrea Monteriù, and Sundarapandian Vaidyanathan. "Robust control of a photovoltaic battery system via fuzzy sliding mode approach," volume 709, pages 115–142. Springer Verlag, 2017. doi: 10.1007/978-3-319-55598-0_6
- [Ch17] Lucio Ciabattoni, Francesco Ferracuti, Alessandro Freddi, Sauro Longhi, and Andrea Monteriù. Personal monitoring and health data acquisition in smart homes, volume Healthcare Technologies, 2017 - IET Digital Library, pages 1–22. IET The Institution of Engineering and Technology, London, 2017
- [Ch16] Alessandro Baldini, Lucio Ciabattoni, Riccardo Felicetti, Francesco Ferracuti, Alessandro Freddi, Andrea Monteriù, and Sundarapandian Vaidyanathan. Particle swarm optimization based sliding mode control design: Application to a quadrotor vehicle, volume 709, pp. 143–169. Springer Verlag, 2017. doi: 10.1007/978-3-319-55598-0_7
- [Ch15] Lucio Ciabattoni, Francesco Ferracuti, Alessandro Freddi, Gianluca Ippoliti, Sauro Longhi, Andrea Monteriù, and Lucia Pepa. Human indoor localization for AAL applications: An RSSI based approach, volume 426, pages 239–250. Filippo Cavallo, Vincenzo Marletta, Andrea Monteriù, Pietro Siciliano, 2017. doi: 10.1109/TAC.2016.2585464
- [Ch14] Maurizio Ciaschini, Monica De Angelis, Andrea Monteriù, Rosita Pretaroli, Francesca Severini, and Claudio Socci. The role of ICT in the Italian health care system, volume 392, pages 3–17. Springer Verlag, 2016. doi: 10.1007/978-3-319-39700-9_1
- [Ch13] Longhi S., Ciabattoni L., Ferracuti F., Freddi A., Monteriù A., Ortenzi D., and Romeo L.. Tecnologie assistive per la vita in- dipendente, volume 35, pages 415–428. Paatron Editore, Bologna, 2016
- [Ch12] A. Freddi, S. Longhi, A. Monteriù, D. Ortenzi and M. Prist, Mobile Networks for Biometric Data Analysis, chapter: Preliminary Study of a Novel Shelving System for Nutrition Habits Measuring. Springer International Publishing, Jul 2016
- [Ch11] L. Cavanini, G. Cimini, A. Freddi, G. Ippoliti, and A. Monteriù. Robot Operating System (ROS): The Complete Reference, chapter "rapros: a ROS Package for Rapid Prototyping," In Studies in Systems, Decision and Control. Springer International Publishing, vol. 625, pp. 491–508, 2016, cited By 2. doi: 10.1007/978-3- 319-26054-9_19
- [Ch10] D. Ortenzi, A. Freddi, S. Longhi, A. Monteriù, and M. Prist. Ambient Assisted Living: Italian Forum 2015, chapter A novel shelving system for nutrition habits measuring," In Lecture Notes in Electrical Engineering. Springer International Publishing, vol. 392, pp. 41–50, 2016, cited By 0. doi: 10.1007/978-3-319-39700-9_4
- [Ch9] F. Benetazzo, S. Iarlori, F. Ferracuti, A. Giantomassi, D. Ortenzi, A. Freddi, A. Monteriù, S. Innocenzi, M. Capecci, M.G. Ceravolo, and S. Longhi. Ambient Assisted Living: Italian Forum 2014, chapter Low Cost RGB-D Vision Based System to Support Motor Disabilities Rehabilitation at Home, pages 449–461. Biosystems & Biorobotics. Springer International Publishing, 2015b. doi: 10.1007/978-3-319-18374-9_42
- [Ch8] A. Giantomassi, M. Capecci, F. Benetazzo, S. Iarlori, F. Ferracuti, A. Freddi, A. Monteriù, S. Innocenzi, P. Casoli, M.G. Ceravolo, S. Longhi, and T. Leo. Ambient Assisted Living: Italian Forum 2014, chapter Training and Retraining Motor Functions at Home with Help of Current Technology for Video Games: Basis for the Project, pa- ges 439–447. Biosystems & Biorobotics. Springer International Publishing, 2015. doi: 10.1007/978-3-319-18374-9_41
- [Ch7] F. Benetazzo, F. Ferracuti, A. Freddi, A. Giantomassi, S. Iarlori, S. Longhi, A. Monteriù, and D. Ortenzi. Ambient Assisted Living: Italian Forum 2014, chapter AAL Technologies for Independent Life of Elderly People, pages 329–343. Biosystems & Biorobotics. Springer International Publishing, 2015a. doi: 10.1007/978-3-319-18374-9_31
- [Ch6] M. Ciaschini, M. De Angelis, A. Monteriù, R. Pretaroli, F. Severini, and C. Socci. Ambient Assisted Living: Italian Forum 2014, chapter Investments and Sustainability of Public Expenditure in the Health Sector, pages 35–46. Biosystems & Biorobotics. Springer International Publishing, 2015. doi: 10.1007/978-3-319-18374-9_4
- [Ch5] A. Dyda, D. Oskin, S. Longhi, and A. Monteriù. Underwater Intelligent Control, chapter Underwater Robot Intelligent Control Based on Multilayer Neural Network. River Publishers, 2014
- [Ch4] F. Benetazzo, A. Freddi, A. Monteriù, V. Harmo, P. Kyrki, and S. Longhi. Ambient Assisted Living: Italian Forum 2013, chapter Autonomous assistive robot for respiratory rate detection and tracking. Springer-Verlag, 2014. 978-3-31901-118-9
- [Ch3] G. Cimini, F. Ferracuti, A. Freddi, S. Iarlori, and A. Monteriù. Ambient Assisted Living: Italian Forum 2013, chapter An odometry and QR code landmarks-based navigation system for impaired wheelchair users. Springer-Verlag, 2014. 978-3-31901-118-9

[Ch2] A. Monteriù and S. Longhi. Fault Detection: Classification, Techniques and Role in Industrial Systems, chapter Model-Based Fault Diagnosis For Industrial Mobile Robots. Nova Science Publisher, 2013. 978-1-62808-999-8

[Ch1] G. Ippoliti, L. Jetto, S. Longhi, and A. Monteriù. Mobile Robots: Perception & Navigation, chapter Comparative Analysis of Mobile Robot Localization Methods Based On Proprioceptive and Exteroceptive Sensors, pages 215–237. Number 11. Literatur Verlag, Germany/ARS, Austria, February, 1 2007. 3-86611-283-1

JOURNALS

[J39] L. Pepa, A. Sabatelli, L. Ciabattoni, A. Monteriù, F. Lamberti and L. Morra, "Stress Detection in Computer Users from Keyboard and Mouse Dynamics," in IEEE Transactions on Consumer Electronics, vol. 67, no. 1, pp. 12-19, Feb. 2021, doi: 10.1109/TCE.2020.3045228

[J38] Alzahab, N.A.; Apollonio, L.; Di Iorio, A.; Alshalak, M.; Iarlori, S.; Ferracuti, F.; Monteriù, A.; Porcaro, C. Hybrid Deep Learning (hDL)-Based Brain-Computer Interface (BCI) Systems: A Systematic Review. *Brain Sci.* 2021, 11, 75. doi: 10.3390/brainsci11010075

[J37] M. Prist, A. Monteriù, E. Pallotta, P. Cicconi, A. Freddi, F. Giuggioloni, E. Caizer, C. Verdini, and S. Longhi, "Cyber-physical manufacturing systems: An architecture for sensor integration, production line simulation and cloud services," *ACTA IMEKO, IMEKO (Hungary)*, vol. 9, no. 4, pp. 39–52, 2020. doi: 10.21014/acta_imeko.v9i4.731

[J36] A. Baldini, R. Felicetti, A. Freddi, S. Longhi, and A. Monteriù, "Actuator Fault-Tolerant Control Architecture for Multicopter Vehicles in Presence of Disturbances," *Journal of Intelligent & Robotic Systems*, Springer Nature (Switzerland), vol. 99, pp. 859–874, 2020. doi: 10.1007/s10846-020-01150-y

[J35] Sara Casaccia, Luca Romeo, Andrea Calvaresi, Nicole Morresi, Andrea Monteriù, Emanuele Frontoni, Lorenzo Scalise, and Gian Marco Revel, "Measurement of Users' Well-Being Through Domestic Sensors and Machine Learning Algorithms," in *IEEE Sensors Journal*, vol. 20, no. 14, pp. 8029-8038, 15 July 2020. doi: 10.1109/JSEN.2020.2981209

[J34] Francesco Ferracuti, Valentina Casadei, Ilaria Marcantoni, Sabrina Iarlori, Laura Burattini, Andrea Monteriù, Camillo Porcaro, "A functional source separation algorithm to enhance error-related potentials monitoring in noninvasive brain-computer interface," *Computer Methods and Programs in Biomedicine*, Volume 191, 2020, 105419, ISSN 0169-2607, doi: 10.1016/j.cmpb.2020.105419

[J33] A. Pallante, L. Adacher, M. Botticelli, S. Pizzuti, G. Comodi, A. Monteriù, "Decision support methodologies and day-ahead optimization for smart building energy management in a dynamic pricing scenario," *Energy and Buildings*, Volume 216, 2020, 109963, ISSN 0378-7788. doi: 10.1016/j.enbuild.2020.109963

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