

PUBLICATIONS of MAURO GAGGERO

(last update: June 3, 2021)

1 Articles published in international journals

- [J1] A. Alessandri, C. Cervellera, M. Cuneo, M. Gaggero, G. Soncin, “Modeling and feedback control for resource allocation and performance analysis in container terminals”, *IEEE Transactions on Intelligent Transportation Systems*, vol. 9, no. 4, pp. 601–614, 2008, DOI:10.1109/TITS.2008.2006737.
- [J2] A. Alessandri, C. Cervellera, M. Cuneo, M. Gaggero, G. Soncin, “Management of logistics operations in intermodal terminals by using dynamic modelling and nonlinear programming”, *Maritime Economics and Logistics*, vol. 11, no. 1, pp. 58–76, 2009, DOI:10.1057/mel.2008.24.
- [J3] A. Alessandri, R. Bolla, M. Gaggero, M. Repetto, “Modeling and identification of nonlinear dynamics for freeway traffic by using information from a mobile cellular network”, *IEEE Transactions on Control Systems Technology*, vol. 17, no. 4, pp. 952–959, 2009, DOI:10.1109/TCST.2009.2014242.
- [J4] M. Parodi, M. Gaggero, M. Storace, “Piecewise linear approximations of multivariate functions: A multiresolution-based compression algorithm suitable for circuit implementation”, *Applied Numerical Mathematics*, vol. 60, no. 9, pp. 924–933, 2010, DOI:10.1016/j.apnum.2010.05.002.
- [J5] A. Alessandri, M. Baglietto, G. Battistelli, M. Gaggero, “Moving-horizon state estimation for nonlinear systems using neural networks”, *IEEE Transactions on Neural Networks*, vol. 22, no. 5, pp. 768–780, 2011, DOI:10.1109/TNN.2011.2116803.
- [J6] A. Alessandri, M. Gaggero, F. Tonelli, “Min-max and predictive control for the management of distribution in supply chains”, *IEEE Transactions on Control Systems Technology*, vol. 19, no. 5, pp. 1075–1089, 2011, DOI:10.1109/TCST.2010.2076283.
- [J7] G. Gnecco, M. Sanguineti, M. Gaggero, “Suboptimal solutions to team optimization problems with stochastic information structure”, *SIAM Journal on Optimization*, vol. 22, no. 1, pp. 212–243, 2012, DOI:10.1137/100803481.
- [J8] A. Alessandri, M. Gaggero, R. Zoppoli, “Feedback optimal control of distributed parameter systems by using finite-dimensional approximation schemes”, *IEEE Transactions on Neural Networks and Learning Systems*, vol. 23, no. 6, pp. 984–996, 2012, DOI:10.1109/TNNLS.2012.2192748.
- [J9] C. Cervellera, M. Gaggero, D. Macciò, “Efficient kernel models for learning and approximate minimization problems”, *Neurocomputing*, vol. 97, pp. 74–85, 2012, DOI:10.1016/j.neucom.2012.04.023.
- [J10] M. Gaggero, G. Gnecco, M. Sanguineti, “Dynamic programming and value-function approximation in sequential decision problems: error analysis and numerical results”, *Journal of Optimization Theory and Applications*, vol. 156, no. 2, pp. 380–416, 2013, DOI:10.1007/s10957-012-0118-2.
- [J11] A. Alessandri, C. Cervellera, M. Gaggero, “Predictive control of container flows in maritime intermodal terminals”, *IEEE Transactions on Control Systems Technology*, vol. 21, no. 4, pp. 1423–1431, 2013, DOI:10.1109/TCST.2012.2200680.
- [J12] C. Cervellera, M. Gaggero, D. Macciò, “Low-discrepancy sampling for approximate dynamic programming with local approximators”, *Computers and Operations Research*, vol. 43, pp. 108–115, 2014, DOI:10.1016/j.cor.2013.09.006.
- [J13] M. Gaggero, G. Gnecco, M. Sanguineti, “Approximate dynamic programming for stochastic N -stage optimization with application to optimal consumption under uncertainty”, *Computational Optimization and Applications*, vol. 58, no. 1, pp. 31–85, 2014, DOI:10.1007/s10589-013-9614-z.
- [J14] L. Caviglione, M. Gaggero, J.-F. Lalande, W. Mazurczyk, M. Urbanski, “Seeing the unseen: revealing mobile malware hidden communications via energy consumption and artificial intelligence”, *IEEE Transactions on Information Forensics and Security*, vol. 11, no. 4, pp. 799–810, 2016, DOI:10.1109/TIFS.2015.2510825.

- [J15] M. Gaggero, L. Caviglione, “Predictive control for energy-aware consolidation in cloud datacenters”, *IEEE Transactions on Control Systems Technology*, vol. 24, no. 2, pp. 461-474, 2016, DOI:10.1109/TCST.2015.2457874.
- [J16] L. Caviglione, M. Gaggero, E. Cambiaso, M. Aiello, “Measuring the energy consumption of cyber security”, *IEEE Communications Magazine*, vol. 55, no. 7, pp. 58-63, 2017, DOI:10.1109/MCOM.2017.1600955.
- [J17] A. Alessandri, M. Gaggero, “Fast moving horizon state estimation for discrete-time systems using single and multi iteration descent methods”, *IEEE Transactions on Automatic Control*, vol. 62, no. 9, pp. 4499-4511, 2017, DOI:10.1109/TAC.2017.2660438.
- [J18] C. Cervellera, M. Gaggero, D. Macciò, “Lattice point sets for state sampling in approximate dynamic programming”, *Optimal Control Applications and Methods*, vol. 38, no. 6, pp. 1193-1207, 2017, DOI:10.1002/oca.2325.
- [J19] M. Gaggero, L. Caviglione, “Model predictive control for energy-efficient, quality-aware, and secure virtual machine placement”, *IEEE Transactions on Automation Science and Engineering*, vol. 16, no. 1, pp. 420-432, 2019, DOI:10.1109/TASE.2018.2826723.
- [J20] A. Cataliotti, C. Cervellera, V. Cosentino, D. Di Cara, M. Gaggero, D. Maccio, G. Marsala, A. Ragusa, G. Tine, “An improved load flow method for MV networks based on LV load measurements and estimations”, *IEEE Transactions on Instrumentation and Measurement*, vol. 68, no. 2, pp. 430-438, 2019, DOI:10.1109/TIM.2018.2847818.
- [J21] M. Gaggero, D. Di Paola, A. Petitti, L. Caviglione, “When time matters: predictive mission planning in cyber-physical scenarios”, *IEEE Access*, vol. 7, no. 1, pp. 11246-11257, 2019, DOI:10.1109/ACCESS.2019.2892310.
- [J22] A. Alessandri, P. Bagnerini, M. Gaggero, “Optimal control of propagating fronts by using level set methods and neural approximations”, *IEEE Transactions on Neural Networks and Learning Systems*, vol. 30, no. 3, pp. 902-912, 2019, DOI:10.1109/TNNLS.2018.2853195.
- [J23] A. Alessandri, P. Bagnerini, M. Gaggero, D. Lengani, D. Simoni, “Dynamic mode decomposition for the inspection of three-regime separated transitional boundary layers using a least squares method”, *Physics of Fluids*, vol. 31, no. 4, art. no. 044103, pp. 1-13, 2019, DOI:10.1063/1.5086225.
- [J24] A. Alessandri, P. Bagnerini, R. Cianci, M. Gaggero, “Optimal propagating fronts using Hamilton-Jacobi equations”, *Mathematics*, vol. 7, no. 11, art. no. 1122, pp. 1-10, 2019, DOI:10.3390/math7111122.
- [J25] A. Alessandri, M. Gaggero, “Fast moving horizon state estimation for discrete-time systems with linear constraints”, *International Journal of Adaptive Control and Signal Processing*, vol. 34, no. 6, pp. 706-720, 2020, DOI:10.1002/acs.3054.
- [J26] A. Alessandri, P. Bagnerini, M. Gaggero, A. Rossi, “State and observer-based feedback control of normal flow equations”, *Automatica*, vol. 117, art. no. 108980, pp. 1-7, 2020, DOI:10.1016/j.automatica.2020.108980.
- [J27] L. Caviglione, M. Gaggero, “Multiobjective placement for secure and dependable smart industrial environments”, *IEEE Transactions on Industrial Informatics*, vol. 17, no. 2, pp. 1298-1306, 2021, DOI:10.1109/TII.2020.2978771.
- [J28] A. Alessandri, P. Bagnerini, M. Gaggero, L. Mantelli, “Parameter estimation of fire propagation models using level set methods”, *Applied Mathematical Modelling*, vol. 92, pp. 731-747, 2021, DOI:10.1016/j.apm.2020.11.030.
- [J29] A. Alessandri, P. Bagnerini, M. Gaggero, D. Lengani, D. Simoni, “Detection of flow regime transitions using dynamic mode decomposition and moving horizon estimation”, *IEEE Transactions on Control Systems Technology*, vol. 29, no. 3, pp. 1324-1331, 2021, DOI:10.1109/TCST.2019.2956027.
- [J30] M. Gaggero, F. Tonelli, “A two-step optimization model for the distribution of perishable products”, *Networks*, in press, DOI:10.1002/net.22008.
- [J31] L. Caviglione, M. Gaggero, M. Paolucci, R. Ronco, “Deep reinforcement learning for multi-objective placement of virtual machines in cloud datacenters”, *Soft Computing*, in press, DOI:10.1007/s00500-020-05462-x.

- [J32] A. Alessandri, P. Bagnerini, M. Gaggero, L. Mantelli, V. Santamaria, A. Traverso, “Black-box modeling and optimal control of a two-phase flow using level set methods”, *IEEE Transactions on Control Systems Technology*, in press, DOI:10.1109/TCST.2021.3067444.
- [J33] L. Cassettari, M. Gaggero, S. Saccaro, “Optimization of gas metering maintenance services: a multiobjective vehicle routing problem with a set of predefined overlapping time windows”, *Networks*, in press, DOI:10.1002/net.22044.

2 Chapters in monographic books

- [BC1] A. Alessandri, C. Cervellera, M. Cuneo, M. Gaggero, “Nonlinear model predictive control for resource allocation in the management of intermodal container terminals”, in L. Magni et al. (Eds.): *Nonlinear Model Predictive Control - Towards New Challenging Applications, Lecture Notes in Control and Information Sciences*, vol. 384, pp. 205-213, Springer-Verlag Berlin Heidelberg, 2009, DOI:10.1007/978-3-642-01094-1_16.
- [BC2] M. Gaggero, G. Gnecco, M. Sanguineti, “Suboptimal policies for stochastic N -stage optimization problems: accuracy analysis and a case study from optimal consumption”, in F. El Ouardighi and K. Kogan (Eds.): *Models and Methods in Economics and Management Science, International Series in Operations Research & Management Science*, vol. 198, pp. 27-50, Springer International Publishing Switzerland, 2014, DOI:10.1007/978-3-319-00669-7_3.
- [BC3] L. Caviglione, M. Gaggero, J.-F. Lalande, W. Mazurczyk, “Understanding information hiding to secure communications and to prevent exfiltration of mobile data”, in M. Migliardi, A. Merlo, S. Al-Haj Baddar (Eds.): *Adaptive Mobile Computing: Advances in Processing Mobile Data Sets, Series Intelligent Data-Centric Systems*, pp. 185-202, Academic Press, Boston, 2017, DOI:10.1016/B978-0-12-804603-6.00009-7.
- [BC4] A. Alessandri, P. Bagnerini, R. Cianci, M. Gaggero, “Optimal control of level sets generated by the normal flow equation”, in C. Klingenberg and M. Westdickenberg (Eds.): *Theory, Numerics and Applications of Hyperbolic Problems I, Springer Proceedings in Mathematics & Statistics*, vol. 236, pp. 29-41, Springer International Publishing Switzerland, 2018, DOI:10.1007/978-3-319-91545-6_3.
- [BC5] C. Cervellera, M. Gaggero, D. Maccio, “A receding horizon approach for berth allocation based on random search optimization”, in M. Paolucci, A. Sciomachen, and P. Uberti (Eds.): *Advances in Optimization and Decision Science for Society, Services and Enterprises, AIRO Springer Series*, Springer Nature Switzerland AG, 2019, DOI:10.1007/978-3-030-34960-8_1.

2.1 Articles invited for presentation at international conferences

- [IC1] A. Alessandri, P. Bagnerini, M. Gaggero, “Optimal control of PDE-based systems by using a finite-dimensional approximation scheme”, *Proceedings of the 2013 American Control Conference*, Washington, USA, 2013, pp. 1280-1285, invited paper, DOI:10.1109/ACC.2013.6580012.
- [IC2] A. Alessandri, P. Bagnerini, M. Gaggero, “Optimal control of level sets dynamics”, *Proceedings of the 2014 American Control Conference*, Portland, USA, 2014, pp. 2208-2213, invited paper, DOI:10.1109/ACC.2014.6859223.
- [IC3] A. Alessandri, M. Gaggero, “Moving-horizon estimation for discrete-time linear and nonlinear systems using the gradient and Newton methods”, *Proceedings of the 55th IEEE Conference on Decision and Control*, Las Vegas, USA, 2016, pp. 2906-2911, invited paper, DOI:10.1109/CDC.2016.7798702.
- [IC4] A. Alessandri, P. Bagnerini, M. Gaggero, “Extended Kalman filtering to design optimal controllers of fronts generated by level set methods”, *Proceedings of the 55th IEEE Conference on Decision and Control*, Las Vegas, USA, 2016, pp. 3966-3971, invited paper, DOI:10.1109/CDC.2016.7798869.
- [IC5] A. Alessandri, P. Bagnerini, M. Gaggero, “Parameter identification of the normal flow equation by using adaptive estimation”, *Proceedings of the 2017 American Control Conference*, Seattle, USA, 2017, pp. 3177-3182, invited paper, DOI:10.23919/ACC.2017.7963436.
- [IC6] A. Alessandri, P. Bagnerini, M. Gaggero, A. Rossi, “Feedback control on the velocity field and source term of a normal flow equation”, *Proceedings of the 2018 American Control Conference*, Milwaukee, USA, 2018, pp. 1714-1719, invited paper, DOI:10.23919/ACC.2018.8431729.

- [IC7] A. Alessandri, P. Bagnerini, M. Gaggero, D. Lengani, D. Simoni, "Moving horizon trend identification based on switching models for data driven decomposition of fluid flows", *Proceedings of the 57th IEEE Conference on Decision and Control*, Miami Beach, USA, 2018, pp. 2138-2143, invited paper, DOI:10.1109/CDC.2018.8619006.
- [IC8] A. Alessandri, P. Bagnerini, C. Carmeli, M. Gaggero, D. Lengani, D. Simoni, "On-line mode decomposition of fluid flows using moving horizon estimation", *Proceedings of the 58th IEEE Conference on Decision and Control*, Nice, France, 2019, pp. 2163-2168, invited paper, DOI:10.1109/CDC40024.2019.9029204.
- [IC9] A. Odetti, M. Bibuli, G. Bruzzone, C. Cervellera, R. Ferretti, M. Gaggero, E. Zereik, M. Caccia, "A preliminary experiment combining marine robotics and citizenship engagement using imitation learning", *Proceedings of the 21st IFAC World Congress*, Berlin, Germany, 2020, IFAC-PapersOnLine vol. 53, no. 2, pp. 14576-14581, invited paper, DOI:10.1016/j.ifacol.2020.12.1464.

3 Articles presented at international conferences

- [C1] M. Gaggero, M. Parodi, M. Storace, "Multiresolution PWL approximations", *Proceedings of the European Conference on Circuit Theory and Design*, Cork, Ireland, 2005, vol. 3, pp. 393-396, DOI:10.1109/ECCTD.2005.1523143.
- [C2] A. Alessandri, R. Bolla, M. Gaggero, M. Repetto, "Identification of freeway traffic dynamics using fluid and black-box nonlinear models", *Proceedings of the 46th IEEE Conference on Decision and Control*, New Orleans, USA, 2007, pp. 2962-2967, DOI:10.1109/CDC.2007.4434450.
- [C3] A. Alessandri, C. Cervellera, M. Cuneo, M. Gaggero, "Nonlinear model predictive control for resource allocation in the management of intermodal container terminals", *Proceedings of the 3rd International Workshop on Assessment and Future Directions of Nonlinear Model Predictive Control (NMPC2008)*, Pavia, Italy, 2008.
- [C4] A. Alessandri, C. Cervellera, M. Cuneo, M. Gaggero, "Nonlinear predictive control for the management of container flows in maritime intermodal terminals", *Proceedings of the 47th IEEE Conference on Decision and Control*, Cancun, Mexico, 2008, pp. 2800-2805, DOI:10.1109/CDC.2008.4739146.
- [C5] C. Cervellera, M. Cuneo, M. Gaggero, F. Tonelli, "A decision support tool based on a queueing model for performance analysis and optimization of container terminals", *Proceedings of the 2010 Annual Conference of the International Association of Maritime Economists (IAME2010)*, Lisbon, Portugal, 2010.
- [C6] M. Gaggero, G. Gnecco, M. Sanguineti, "Suboptimal solutions to team optimization problems with statistical information structure", *24th European Conference on Operational Research (EUROXXIV)*, Lisbon, Portugal, 2010.
- [C7] A. Alessandri, R. Cianci, M. Gaggero, R. Zoppoli, "Approximate solution of feedback optimal control problems for distributed parameter systems", in *Proceedings of the 8th IFAC Symposium on Nonlinear Control Systems (NOLCOS2010)*, Bologna, Italy, 2010, pp. 987-992, DOI:10.3182/20100901-3-IT-2016.00197.
- [C8] A. Alessandri, P. Bagnerini, M. Gaggero, M. Ghio, R. Martinelli, "Design specifications of an UAV for environmental monitoring, safety, video surveillance, and urban security", *1st Euro-Mediterranean Summit on New Technologies for Urban Security (SAFECITY2011)*, Genoa, Italy, 2011.
- [C9] A. Alessandri, M. Gaggero, F. Tonelli, "Integer tree-based search and mixed-integer optimal control of distribution chains", *Proceedings of the 50th IEEE Conference on Decision and Control*, Orlando, USA, 2011, pp. 489-494, DOI:10.1109/CDC.2011.6160626.
- [C10] A. Alessandri, P. Bagnerini, M. Gaggero, M. Ghio, R. Martinelli, "UAVs for urban security: a successful testbed for emergency support", *2nd Euro-Mediterranean Summit on New Technologies for Urban Security, Civil Protection and Sustainable Development (SAFECITY2012)*, Genoa, Italy, 2012.
- [C11] A. Alessandri, P. Bagnerini, M. Gaggero, M. Ghio, "Optimal control of level set dynamics via a finite-dimensional approximation scheme", *14th International Conference on Hyperbolic Problems: Theory, Numerics, Applications (HYP2012)*, Padua, Italy, 2012.

- [C12] A. Alessandri, M. Gaggero, F. Tonelli, “Optimal and predictive control of distribution chains by using integer tree-based search and mixed-integer programming”, *4th IFAC Nonlinear Model Predictive Control Conference (NMPC2012)*, Noordwijkerhout, The Netherlands, 2012, pp. 238-244, DOI:10.3182/20120823-5-NL-3013.00043.
- [C13] M. Gaggero, G. Gnecco, T. Parisini, M. Sanguineti, R. Zoppoli, “Approximation structures with moderate complexity in functional optimization and dynamic programming”, *Proceedings of the 51th IEEE Conference on Decision and Control*, Maui, USA, 2012, pp. 1902-1908, DOI:10.1109/CDC.2012.6426656.
- [C14] C. Cervellera, M. Gaggero, D. Macciò, R. Marcialis, “Quasi-random sampling for approximate dynamic programming”, *Proceedings of the 2013 International Joint Conference on Neural Networks (IJCNN2013)*, Dallas, USA, 2013, pp. 2567-2574, DOI:10.1109/IJCNN.2013.6707065.
- [C15] C. Cervellera, M. Gaggero, D. Macciò, “An analysis based on F-discrepancy for sampling in regression tree learning”, *Proceedings of the 2014 International Joint Conference on Neural Networks (IJCNN2014)*, Beijing, China, 2014, pp. 1115-1121, DOI:10.1109/IJCNN.2014.6889665.
- [C16] C. Cervellera, M. Gaggero, D. Macciò, R. Marcialis, “Lattice sampling for efficient learning with Nadaraya-Watson local models”, *Proceedings of the 2014 International Joint Conference on Neural Networks (IJCNN2014)*, Beijing, China, 2014, pp. 1915-1922, DOI:10.1109/IJCNN.2014.6889758.
- [C17] C. Cervellera, M. Gaggero, D. Macciò, R. Marcialis, “An approach to exploit non-optimized data for efficient control of unknown systems through neural and kernel models”, *Proceedings of the 2014 International Joint Conference on Neural Networks (IJCNN2014)*, Beijing, China, 2014, pp. 1856-1863, DOI:10.1109/IJCNN.2014.6889794.
- [C18] A. Alessandri, M. Gaggero, F. Tonelli, “Robust predictive control for the management of multi-echelon distribution chains”, *Proceedings of the 53rd IEEE Conference on Decision and Control*, Los Angeles, USA, 2014, pp. 6459-6464, DOI:10.1109/CDC.2014.7040402.
- [C19] M. Gaggero, L. Caviglione, “A predictive control approach for energy-aware consolidation of virtual machines in cloud computing”, *Proceedings of the 53rd IEEE Conference on Decision and Control*, Los Angeles, USA, 2014, pp. 5308-5313, DOI:10.1109/CDC.2014.7040219.
- [C20] N. Bianchi, C. Cervellera, M. Gaggero, R. Marcialis, M. Penco, F. Sozzi, “Group model building and computational intelligence tools for stakeholder engagement and deliberative processes”, *Proceedings of the 3rd International Symposium on Advances in Business Management - Towards Systemic Approach*, Perugia, Italy, 2015, pp. 53-57.
- [C21] M. Gaggero, F. Tonelli, “Optimal control of distribution chains for perishable goods”, *Proceedings of the 15th IFAC Symposium on Information Control in Manufacturing (INCOM2015)*, Ottawa, Canada, 2015, IFAC-PapersOnLine vol. 48, no. 3, pp. 1049-1054, DOI:10.1016/j.ifacol.2015.06.222.
- [C22] C. Cervellera, M. Gaggero, D. Macciò, R. Marcialis, “Lattice point sets for efficient kernel smoothing models”, *Proceedings of the 2015 International Joint Conference on Neural Networks (IJCNN2015)*, Killarney, Ireland, 2015, pp. 1277-1284, DOI:10.1109/IJCNN.2015.7280469.
- [C23] C. Cervellera, M. Gaggero, D. Macciò, R. Marcialis, “Efficient use of Nadaraya-Watson models and low-discrepancy sequences for approximate dynamic programming”, *Proceedings of the 2015 International Joint Conference on Neural Networks (IJCNN2015)*, Killarney, Ireland, 2015, pp. 1895-1902, DOI:10.1109/IJCNN.2015.7280552.
- [C24] M. Gaggero, L. Caviglione, “Model predictive control for the placement of virtual machines in cloud computing applications”, *Proceedings of the 2016 American Control Conference*, Boston, USA, 2016, pp. 1987-1992, DOI:10.1109/ACC.2016.7525210.
- [C25] D. Di Paola, M. Gaggero, A. Petitti, L. Caviglione, “Optimal control of time instants for task replanning in robotic networks”, *Proceedings of the 2016 American Control Conference*, Boston, USA, 2016, pp. 1993-1998, DOI:10.1109/ACC.2016.7525211.
- [C26] A. Alessandri, P. Bagnnerini, M. Gaggero, A. Traverso, “Further results on the optimal control of fronts generated by level set methods”, *Proceedings of the 2016 American Control Conference*, Boston, USA, 2016, pp. 5225-5230, DOI:10.1109/ACC.2016.7526488.

- [C27] A. Alessandri, P. Bagnerini, M. Gaggero, “Optimal control for level set methods involved in PDE systems”, *XVI International Conference on Hyperbolic Problems: Theory, Numerics, Applications (HYP2016)*, Aachen, Germany, 2016.
- [C28] A. Alessandri, M. Gaggero, “Moving horizon state estimation for constrained discrete-time systems by using fast descent methods”, *Proceedings of the 56th IEEE Conference on Decision and Control*, Melbourne, Australia, 2017, pp. 2176-2181, DOI:10.1109/CDC.2017.8263967.
- [C29] A. Alessandri, P. Bagnerini, M. Gaggero, L. Mantelli, V. Santamaria, A. Traverso, “Black-box modeling and optimal control of a two-phase flow by using Navier-Stokes equations and level set methods”, *Proceedings of the 2018 American Control Conference*, Milwaukee, USA, 2018, pp. 3429-3434, DOI:10.23919/ACC.2018.8431680.
- [C30] M. Bibuli, G. Bruzzone, M. Caccia, C. Cervellera, R. Ferretti, M. Gaggero, A. Odetti, E. Zereik, M. Viviani, M. Altosole, “Evolution of autonomous surface vehicles”, *Proceedings of the 19th International Conference on Computer and IT Applications in the Maritime Industries (COMPIT2020)*, Pontignano, Italy, 2020, pp. 26-37.
- [C31] C. Cervellera, M. Gaggero, D. Maccio “Policy optimization for berth allocation problems”, *Proceedings of the 2021 International Joint Conference on Neural Networks (IJCNN2021)*, in press, 2021.

4 Chapters in national books

- [NB1] A. Alessandri, M. Baglietto, G. Battistelli, M. Gaggero, “Reti neurali per la stima dello stato di sistemi dinamici non lineari”, in *CNR.IT - Highlights 2010/2011*, p. 167, CNR Edizioni, 2012.

5 Articles presented at national conferences

- [NC1] A. Alessandri, C. Cervellera, M. Cuneo, M. Gaggero, A.F. Grassia, G. Soncin, “Model-based control of container handling in intermodal terminals for performance optimization”, *XXXVIII Annual Conference of the Italian Operational Research Society (AIRO) 2007*, Genoa, Italy, 2007.
- [NC2] A. Alessandri, R. Bolla, M. Gaggero, M. Repetto, “Identification of nonlinear dynamics for freeway traffic by using information from a mobile cellular network”, *Annual Meeting SIDRA 2007*, Genoa, Italy, 2007.
- [NC3] A. Alessandri, C. Cervellera, M. Cuneo, M. Gaggero, A.F. Grassia, G. Soncin, “Predictive control of container flows in intermodal terminals”, *Annual Meeting SIDRA 2007*, Genoa, Italy, 2007.
- [NC4] M. Gaggero, G. Gnecco, M. Sanguineti, “Decentralized optimization problems with cooperating decision makers”, *XXXI Annual Conference of the Italian Operational Research Society (AIRO) 2010*, Villa San Giovanni, Italy, 2010.
- [NC5] G. Gnecco, M. Sanguineti, M. Gaggero, “Approximate dynamic programming by variable-basis schemes: Error analysis and numerical results”, *VI Winter Conference of the Italian Operational Research Society (AIRO) 2011*, Cortina d’Ampezzo, Italy, 2011.
- [NC6] M. Gaggero, G. Gnecco, M. Sanguineti, R. Zoppoli, “Dynamic programming and value-function approximation with application to optimal consumption”, *XXXIII Annual Conference of the Italian Operational Research Society (AIRO) 2012*, Vietri sul Mare, Italy, 2012.
- [NC7] A. Alessandri, M. Baglietto, G. Battistelli, M. Gaggero, “Moving-horizon state estimation for nonlinear systems using neural networks”, *AUTOMATICA.IT-2012, Annual Meeting SIDRA 2012*, Benevento, Italy, 2012.
- [NC8] C. Cervellera, M. Gaggero, D. Maccio, “A receding horizon approach for berth allocation based on random search optimization”, *International Conference on Optimization and Decision Science, XLIX Annual Conference of the Italian Operational Research Society (AIRO)*, Genoa, Italy, 2019.

6 Other publications

- [O1] G. Bozza, M. Gaggero, “Analisi e progetto assistito da calcolatore di multiporte lineari a tratti”, thesis for the B.S. degree in Electronic Engineering of the University of Genoa, 2003, in italian.
- [O2] M. Gaggero, “Identificazione di sistemi dinamici non lineari tramite modelli lineari a tratti”, thesis for the M.S. degree in Electronic Engineering of the University of Genoa, 2005, in italian.
- [O3] M. Gaggero, “Feedback optimal control of systems described by partial differential equations”, thesis for the Ph.D. degree in Mathematical Engineering and Simulation of the University of Genoa, 2010.