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Formazione, attività scientifica e/o professionale

Formazione:

Settembre 2013 – Maggio 2016, Dottorato di Ricerca in Ingegneria Aerospaziale, Navale e della Qualità (28° ciclo), Università degli Studi di Napoli "Federico II" – Dipartimento di Ingegneria Industriale, Sezione Navale

Settembre 2009 – Marzo 2012, Laurea Specialistica in Ingegneria Navale, Università degli Studi di Napoli "Federico II" – Facoltà di Ingegneria

Settembre 2005 – Giugno 2009, Laurea di I livello in Ingegneria Navale, Accademia Navale di Livorno

Attività scientifica e/o professionale:

Maggio 2023 – In corso, Professore Associato di Architettura Navale Dipartimento di Ingegneria Industriale, Università degli Studi di Napoli "Federico II"

Maggio 2023 – In corso, CFD consultant, Numerical Team - Aero and Hydrodynamic Dept. Force Technology / Danish Maritime Institute (DMI), Kgs. Lyngby, Denmark

Febbraio 2020 – Maggio 2023, Senior Team Leader - Numerical Team - Aero and Hydrodynamic Dept., Force Technology / Danish Maritime Institute (DMI), Kgs. Lyngby, Denmark

Gennaio 2018 – Gennaio 2020, Addetto Progetto Unità Navali, Ufficio Progetti - 7° Reparto Navi Stato Maggiore Marina, Ministero della Difesa, Roma

Settembre 2017 – Gennaio 2018, Capo Sezione Naviglio Speciale, Ufficio Progetti - 7° Reparto Navi, Stato Maggiore Marina, Ministero della Difesa, Roma

Maggio 2016 – Settembre 2017, Capo Reparto Scafo di Nave Carabiniere (FREMM F593), Prima Divisione Navale, La Spezia

Aprile 2012 – Settembre 2013, Capo Nucleo/Componente Scafo della Portaerei Cavour, Ufficiale Responsabile della Difesa Passiva Comando in Capo della Squadra Navale, Taranto

Attività didattica universitaria

2023 – in corso, Docente del corso di Progetto di Navi Militari, Corso di Laurea in Ingegneria Navale, Dipartimento di Ingegneria Industriale, Università degli Studi di Napoli "Federico II"

2023 – in corso, Docente del corso di Geometria della Nave, Corso di Ingegneria Navale, Dipartimento di Ingegneria Industriale, Università degli Studi di Napoli "Federico II"

2023 – in corso, Docente del corso di Metodi Numerici per l'Architettura Navale, Corso di Ingegneria Navale, Dipartimento di Ingegneria Industriale, Università degli Studi di Napoli "Federico II"

2015 – in corso, Docente a contratto di Principi del Volo, Corso di Laurea in Scienze e Tecnologie dei Trasporti, Università Telematica "Giustino Fortunato"

2018-202, Docente a contratto di Sicurezza del Trasporto Aereo, Corso di Laurea in Scienze e Tecnologie dei Trasporti, Università Telematica "Giustino Fortunato"

Ulteriori esperienze e informazioni

Membro del Comitato Scientifico del Convegno Internazionale INT-NAM (International Naval Architecture and Maritime Symposium) 2023 (Istanbul, Turchia).

Membro del Comitato Scientifico del Convegno Internazionale HSMV (High Speed Marine Vehicles) 2020 e 2023 (Napoli, Italia).

Membro del Reviewers Board della rivista internazionale Journal of Marine Science and Engineering (JMSE ISSN 2077-1312), MDPI.

Guest Editor delle seguenti Special Issues di Journal of Marine Science and Engineering (ISSN 2077-1312):

- Special Issue "Unconventional Marine Vehicles"
- Special Issue "Stability and Seakeeping of Marine Vessels"
- Special Issue "Verification and Validation Analysis on Marine Applications"

Membro del Editorial Board della rivista Cogent Engineering Journal - Taylor and Francis (ISSN 2331-1916)

Membro del Associate Board della rivista Journal of Marine Science and Application (ISSN 1671-9433)

Membro della commissione di dottorato dell'UTAS (University of Tasmania) per l'a.a. 2019/20

Guest Editor per la raccolta di articoli "Prime Archives in Marine Science"

Membro del Comitato Porto del Comune di Ortona (CH)

Membro della Associazione Italiana di Tecnica Navale (ATENA)

Membro della Society of Naval Architects and Marine Engineering (SNAME)

16 luglio 2015: premio “Fondazione Ammiraglio Umberto Pugliese” per gli studi condotti nel campo dell’Architettura Navale assegnato dall’Accademia Navale di Livorno per il lavoro condotto nell’ambito della progettazione delle forme di carena della nuova unità da pattugliamento polivalente d’altura (PPA) della Marina Militare Italiana.

16 luglio 2013: premio “Fondazione Ammiraglio Umberto Pugliese” per gli studi condotti nel campo dell’Architettura Navale assegnato dall’Accademia Navale di Livorno per il lavoro condotto nell’ambito della progettazione di una nuova unità da pattugliamento della Guardia di Finanza.

Relatore di più di 30 tesi triennali e magistrali presso università italiane ed estere (DTU, Chalmers University).

Pubblicazioni scientifiche

1. Niazmand Bilandi, R., Dashtimanesh, A., Mancini, S., Vitiello, L. Comparative study of experimental and CFD results for stepped planing hulls, Ocean Engineering, 2023, 280, 114887

2. Capasso, S., Tagliafierro, B., Mancini, S., ...Domínguez, J.M., Viccione, G., Regular Wave Seakeeping Analysis of a Planing Hull by Smoothed Particle Hydrodynamics: A Comprehensive Validation, Journal of Marine Science and Engineering, 2023, 11(4), 700

3. L. A. Cotfas, C. Delcea, S. Mancini, C. Ponsiglione, L. Vitiello, An agent-based model for cruise ship evacuation considering the presence of smart technologies on board, Expert Systems with Applications, 2023, 214, 119124

4. Capasso, S., Tagliafierro, B., Mancini, S., ...Domínguez, J.M., Viccione, G., Regular Wave Seakeeping Analysis of a Planing Hull by Smoothed Particle Hydrodynamics: A Comprehensive Validation, Journal of Marine Science and Engineering, 2023, 11(4), 700

5. L. Vitiello, S. Mancini, R. N., F. De Luca, A. Dashtimanesh, V. Nappo, A comprehensive stepped planing hull systematic series: Part 1 - Resistance test, Ocean Engineering, 2022, 266, 112242

6. F. Roshan, S. Tavakoli, S. Mancini, A. Dashtimanesh, Dynamic of Tunneled Planing Hulls in Waves, Journal of Marine Science and Engineering, 2022, 10(8), 1038

7. S. Tavakoli, P Shaghaghi, S Mancini, F De Luca, A Dashtimanesh, Wake waves of a planing boat: An experimental model, Physics of Fluids, 2022, 34(3), 037104, American Institute of Physics, doi https://doi.org/10.1063/5.0084074

8. X. Zhang, P. Li & S. Mancini, Numerical investigation into motion responses of the intact and damaged DTMB 5415 based on the AMR method in regular waves, 2022, Ships and Offshore

Structures, Taylor and Francis, DOI: 10.1080/17445302.2022.2067418

9. F. Spinelli, S. Mancini, L. Vitiello, R. N. Bilandi, M. De Carlini, Shipping Decarbonization: An Overview of the Different Stern Hydrodynamic Energy Saving Devices, Journal of Marine Science and Engineering, 2022, 10(5), 574, Multidisciplinary Digital Publishing Institute (MDPI), doi https://doi.org/10.3390/jmse10050574

10. S. Tavakoli, A. Dashtimanesh, S. Mancini, J. A. Mehr, S. Milanesi, Effects of Vertical Motions on Roll of Planing Hulls, 2021, Journal of Offshore Mechanics and Arctic Engineering-Transactions of the ASME, vol. 143, 041401, ISSN: 0892-7219, ASME, doi: https://doi.org/10.1115/1.4050210

11. X. Zhang, Z. Lin, S. Mancini, Z. Pang, P. Li, F. Liu, Numerical investigation into the effect of the internal opening arrangements on motion responses of a damaged ship, Applied Ocean Research, 2021, 117, 102943, Elsevier, doi https://doi.org/10.1016/j.apor.2021.102943

12. X. Zhang, P. Li, S. Mancini, Numerical investigation into the resistance performance for the damaged DTMB 5415 ship in calm water and regular head waves, Ships and Offshore Structures, 2021, Taylor and Francis, doi https://doi.org/10.1080/17445302.2021.2000264

13. B. Tagliafierro, S. Mancini, P. Ropero-Giralda, J. M. Dominguez, A. J. C. Crespo, G. Viccione, Performance Assessment of a Planing Hull Using the Smoothed Particle Hydrodynamics Method, 2021, Journal of Marine Science and Engineering, vol. 9, p. 1-19, Multidisciplinary Digital Publishing Institute (MDPI), doi: https://doi.org/10.3390/jmse9030244

14. D. Ozturk, C. Delen, S. Mancini, M. O. Serifoglu, T. Hizarci, Full-scale CFD Analysis of Double-M Craft Seakeeping Performance in Regular Head Waves, 2021, Journal of Marine Science and Engineering, vol. 9, 504, Multidisciplinary Digital Publishing Institute (MDPI), doi: https://doi.org/10.3390/jmse9050504

15. S. Jamei, A Maimun, R. Niazmand Bilandi, N. Azwadi, S. Mancini, L. Vitiello, M. De Carlini, Wake behind a Compound Wing in Ground Effect, Journal of Marine Science and Engineering, 2020, Multidisciplinary Digital Publishing Institute (MDPI), https://doi.org/10.3390/jmse8030156

16. R. N. Bilandi, L. Vitiello, S. Mancini, V. Nappo, F. Roshan, S. Tavakoli, A. Dashtimanesh, Calm-water performance of a boat with two swept steps at high-speeds: Laboratory measurements and mathematical modeling, Procedia Manufacturing 2020 42, 467-474, Elsevier, https://doi.org/10.1016/j.promfg.2020.02.046

17. X. Zhang, Z. Lin, S Mancini, P. Li, D. Liu, F. Liu, Z. Pang, Numerical Investigation into the Effect of Damage Openings on Ship Hydrodynamics by the Overset Mesh Technique, Journal of Marine Science and Engineering 2020 8 (1), 11, Multidisciplinary Digital Publishing Institute (MDPI), https://doi.org/10.3390/jmse8010011

18. S Tavakoli, RN Bilandi, S Mancini, F De Luca, A Dashtimanesh, Dynamic of a Planing Hull in Regular Waves: Comparison of Experimental, Numerical and Mathematical Methods, Ocean Engineering, 2020, 217, 107959, Elsevier, https://doi.org/10.1016/j.oceaneng.2020.107959

19. X. Zhang, Z. Lin, S. Mancini, P. Li, Z. Li, and F. Liu, A numerical Investigation on the Flooding Process of Multiple Compartments Based on the Volume of Fluid Method, Journal of Marine Science and Engineering 2019, Multidisciplinary Digital Publishing Institute (MDPI),

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20. A. Dashtimanesh, A. Esfandiari, S. Mancini: Performance Prediction of Two-Stepped Planing Hulls Using Morphing Mesh Approach. Journal of Ship Production and Design 01/2018; Society of Naval Architects and Marine Engineers, doi: https://doi.org/10.5957/jspd.160046

21. F. De Luca, S. Mancini, C. Pensa, G. Raiola: Numerical Assessment of Self-Propulsion Factors for a Fast Displacement Hull Using Different Propeller-Discretization. Transactions RINA, Vol 160, Part B2, International Journal of Small Craft Technology, Jul-Dec 2018, RINA, doi: 10.3940/rina.ijsct.2018.b2.214

22. S. Tavakoli, A. Dashtimanesh, S. Mancini: A theoretical method to explore influence of free roll motion on behavior of a high speed planing vessel through steady yawed motion. Transactions RINA, Vol 160, Part B2, International Journal of Small Craft Technology, Jul-Dec 2018, RINA, doi: 10.3940/rina.ijsct.2018.b2.213

23. R. N. Bilandi, S. Mancini, L. Vitiello, S. Miranda, M. De Carlini: A Validation of Symmetric 2D + T Model Based on Single-Stepped Planing Hull Towing Tank Tests. Journal of Marine Science and Engineering 2018, 6(4), 136, Multidisciplinary Digital Publishing Institute (MDPI), https://doi.org/10.3390/jmse6040136

24. S. Mancini, E. Begovic, A. Incecik, S. H. Day: Verification and validation of numerical modelling of DTMB 5415 roll decay. Ocean Engineering 05/2018; 162, Elsevier, doi:10.1016/j.oceaneng.2018.05.031

25. A. De Marco, S. Mancini, L. Vitiello, R. Scognamiglio, S. Miranda: Experimental and numerical hydrodynamic analysis of a stepped planing hull. Applied Ocean Research 03/2017; 64, Elsevier, doi: https://doi.org/10.1016/j.apor.2017.02.004

26. F. De Luca, S. Mancini, C. Pensa, S. Miranda: An Extended Verification and Validation Study of CFD Simulations for Planing Hulls. Journal of Ship Research 06/2016; 60(2):101-118, Society of Naval Architects and Marine Engineers, doi: https://doi.org/10.5957/josr.60.2.160010

27. A. De Marco, S. Mancini, C. Pensa, G. Calise, F. De Luca: Flettner Rotor Concept for Marine Applications: A Systematic Study. International Journal of Rotating Machinery 06/2016; 2016(4): 12, Hindawi, doi: https://doi.org/10.1155/2016/3458750

28. E. Begovic, C. Bertorello, S. Mancini: Hydrodynamic Performances of Small Size Swath Craft. Brodogradnja/Shipbuilding 12/2015; 66(4):1-22, University of Zagreb Faculty of Mechanical Engineering and Naval Architecture, https://hrcak.srce.hr/149744

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29. F. De Luca, S. Mancini, C. Pensa, R. Pigazzini, V. Sorrentino, Full-scale CFD simulations of Air Lubrication with DIS-based Air Cavity for Planing Hull, 10th Conference on Computational Methods in Marine Engineering (Marine 2023)

30. Capasso, S., Tagliafierro, B., Mancini, S., De Luca, F., Martínez-Estévez I., Altomare C., Domínguez, J.M., Crespo A. J. C., Pensa C., Viccione, G., Preliminary Investigation into the Dynamic of Planing Hulls in Regular Waves Using the Smoothed Particle Hydrodynamics Method

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31. J. F. Otzen, T. Ingvorsen, P. de Pablo, S. Mancini, C. D. Simonsen, Manoeuvering Predictions for The KCS Container Ship Based on RANS Simulations, SIMMAN 2023, KRISO; Songdo, Incheon, Korea.

32. De Biase, M., Basile, V., Mancini, S. Energy-Saving Devices: A Retrofit Stern Flap Solution on the De La Penne Destroyer Class (Numerical Analysis and Experimental Tests), Progress in Marine Science and Technology, 2022, 6, pp. 702–709

33. F. De Luca, S. Mancini, C. Pensa, R. Pigazzini, V. Sorrentino A DIS-based air cavity concept for planing hull, NAV 2022, 20th International Conference on Ship and Maritime Research, Genova-La Spezia, 15 – 17 June 2022

34. X. Zhang, S. Mancini, P. Li, Numerical Investigation into the Effects of Layer and Accumulated Ice Floes on the Hydrodynamics Performance of the Damaged Ship, ISOPE 2022, Shanghai, June 2022

35. L. Vitiello, S. Mancini, R N. Bilandi, An Overview of Stepped Hull Performance Evaluation: Sea Trial Data *vs* Full Scale CFD Simulation, HSMV 2020, Naples 15-16 October 2020, 10.3233/PMST200026

36. V. Basile, M. De Biase, S. Mancini, Stern Flap Solution to Contain the Speed Performance Loss due to the Ship Weight Growth: an application on the "De La Penne" Destroyer Class, HSMV 2020, Naples 15-16 October 2020, 10.3233/PMST200022

37. S. Mancini, C. Pensa, L. Vitiello, R. N. Bilandi, M. De Carlini: The Failed Project of "Heavy" MAS. Proceedings of CNM 2019, 3rd International Conference on Nautical and Maritime Culture, Naples, Italy, 11/2019, https://doi.org/10.3233/PMST190017

38. C. Delen, F. De Luca, S. Mancini, C. Pensa: Propeller Diameter Selection Based on Numerical Analysis of Wake and Induced-Pressure on Blades and on Tunnel Stern Surface, Proceedings of IMAM 2019, International Maritime Association of the Mediterranean, Varna, Bulgary.09/2019

39. R. N. Bilandi, S. Mancini, A. Dashtimanesh, S. Tavakoli, M. De Carlini: A Numerical and Analytical Way for Double-Stepped Planing Hull in Regular Wave. Proceedings of MARINE 2019: VIII International Conference on Computational Methods in Marine Engineering, Gothenburg; Sweden, 05/2019

40. F. Di Caterino, R. N. Bilandi, S. Mancini, A. Dashtimanesh, M. De Carlini: A Numerical Way for a Stepped Planing Hull Design and Optimization. Proceedings of NAV 2018: 19th International Conference on Ship and Maritime Research, Trieste; 06/2018, DOI:10.3233/978-1-61499-870-9-220

41. F. De Luca, S. Mancini, C. Pensa, G. Raiola: Numerical Assessment of Self-Propulsion Factors for a Fast Displacement Hull Using Different Propeller-Discretization. 11th High Speed Marine Vehicles Symposium (HSMV 2017), Naples; 10/2017, ISSN 2532-4888

42. S. Tavakoli, A. Dashtimanesh, S. Mancini: A theoretical method to explore influence of free roll motion on behavior of a high speed planing vessel through steady yawed motion. 11th High Speed Marine Vehicles Symposium (HSMV 2017), Naples; 10/2017, ISSN 2532-4888

43. S. Pennino, S. Mancini, A. Scamardella: Dynamic Equilibrium and Resistance Evaluation for Warped Planing Hulls. 14th FAST Sea Transportation 2017, 27th – 29th September, Nantes, France; 09/2017

44. S. Mancini, F. De Luca, A. Ramolini: Towards CFD guidelines for planing hull simulations based on the Naples Systematic Series. Computational Methods in Marine Engineering VII - Marine 2017, 15th – 17th May, Nantes; 05/2017

45. S. Pennino, H. Klymenko, A. Scamardella, S. Mancini, E. Begovic: Three-dimensional pressure distribution on planing hulls. Proceedings of the 3rd International Conference on Maritime Technology and Engineering (MARTECH 2016), Lisbon, Portugal, 4-6 July 2016. Maritime Technology and Engineering III, 06/2016: pages 353-360; ISBN: 978-1-138-03000-8, DOI:10.1201/b21890-49

46. F. De Luca, S. Mancini, A. Manfredini, C. Pensa, R. Scognamiglio: Interceptor Device for a High-Speed Displacing Craft (Comparison Between CFD Simulation and Experimental Data). 18th International Conference on Ships and Shipping Research (NAV 2015), June 24th – 26th, Lecco, Italy; 06/2015, ISBN 978-88-940557-1-9, doi:10.13140/RG.2.1.3047.9842

47. A. De Marco, S. Mancini, C. Pensa, R. Scognamiglio, L. Vitiello: Marine Application of Flettner Rotors: Numerical Study on a Systematic Variation of Geometric Factor by DOE Approach. Computational Methods in Marine Engineering VI - Marine 2015, June 15th - 17th, Rome, Italy; 06/2015, ISBN: 978-84-943928-6-3, doi:10.13140/RG.2.1.4964.9122

48. S. Mancini, E. Begovic, D. Pizzirusso, A. H. Day, A. Incecik: Roll Damping Assessment of Intact and Damaged Ship by CFD and EFD Methods. Proceedings of the 12th International Conference on the Stability of Ships and Ocean Vehicles (STAB 2015), 14th -19th June 2015, Glasgow, UK; 06/2015

49. A. De Marco, S. Mancini, C. Pensa: Preliminary Analysis for Marine Application of Flettner Rotors. 2nd International Symposium on Naval Architecture and Maritime (INT-NAM 2014), 23-24 October 2014, Yıldız Technical University, Istanbul; 10/2014, ISBN: 978-605-4123-32-2, doi:10.13140/2.1.4921.3765

50. F. De Luca, S. Mancini, C. Pensa, G. Staiano: Numerical evaluation (CFD) of Wake and Thrust deduction fraction of a Warped Hard Chine Hulls Systematic Series. 10th High Speed Marine Vehicles Symposium (HSMV), Naples; 10/2014

Libri e Capitoli in libri

51. Stability and Seakeeping of Marine Vessels, edited by Ermina Begovic and Simone Mancini, Printed Edition of the Special Issue published on Journal of Marine Science and Engineering, MDPI, Basel, Switzerland, ISBN 978-3-0365-0971-6.

52. Prime Archives in Marine Science, edited by Simone Mancini and Luigi Vitiello, Vide Leaf, India, ISBN: 978-93-92117-37-4

53. A. De Marco, F. De Luca, S. Mancini, S. Miranda, C. Pensa, R. Scognamiglio, G. Staiano: Contribution of the High-Performance Computing (HPC) in Naval Architecture Researches. High Performance Scientific Computing Using Distributed Infrastructures, Edited by Giuliani Laccetti, Leonardo Merola, Roberto Bellotti, Giuseppe Andronico, Guglielmo de Nardo, Giorgio Maggi, Guido Russo, Lucia Silvestris, Enrico Tassi, Sabina Tangaro, 08/2016: chapter 27: pages 319 - 327; World Scientific., ISBN: 978-981-4759-70-0, DOI:10.1142/9789814759717_0027

54. E. Begovic, S. Mancini, A. H. Day, A. Incecik: Applicability of CFD Methods for Roll Damping Determination of Intact and Damaged Ship: Results and Scientific Applications Derived from the Italian PON ReCaS Project. High Performance Scientific Computing Using Distributed Infrastructures, Edited by Giuliani Laccetti, Leonardo Merola, Roberto Bellotti, Giuseppe Andronico, Guglielmo de Nardo, Giorgio Maggi, Guido Russo, Lucia Silvestris, Enrico Tassi, Sabina Tangaro, 09/2016: chapter 29: pages 343 - 359; World Scientific., ISBN: 978-981-4759-70-0, DOI:10.1142/9789814759717_0029

Napoli, 05/09/2023

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