Alessandro Neri

09/04/1996

Department of Industrial Engineering

Alma Mater Studiorum — University of Bologna

Email • Other contacts

Current Position

Phd Student in Automotive Engineering for Intelligent Mobility (Cycle XXXVIII)

Department of Industrial Engineering — University of Bologna

Research Topic: Innovative sustainable design approaches and efficient production systems for the automotive sector

Education

2022 - Present University of Bologna - Bologna, Italy

PhD in Automotive Engineering for Intelligent Mobility Mentors: Prof. Rita Gamberini, Dr. Maria Angela Butturi.

2017 – 2019 University of Modena and Reggio Emilia – Reggio Emilia, Italy

Master's Degree in Management Engineering

Finale Grade: 110/110.

Educational Activities

2024 – 2025 University of Modena and Reggio Emilia – Reggio Emilia, Italy

Teaching of "Logistics and Production Management", Bachelor's Degree in Management Engineering – Academic Year 2024/2025

Indexed Pubblications

Neri, A., Butturi, M. A., Tomasin Da Silva, L., Lolli, F., Gamberini, R., & Sellitto, M. A. (2025). Fostering lithium-ion battery remanufacturing through Industry 5.0.

International Journal on Interactive Design and Manufacturing (IJIDeM). https://doi.org/10.1007/s12008-025-02229-2

- Butturi, M. A., Neri, A., Mercalli, F., & Gamberini, R. (2025). Sustainability-Oriented Innovation in the Textile Manufacturing Industry: Pre-Consumer Waste Recovery and Circular Patterns. Environments, 12(3), Article 3. https://doi.org/10.3390/environments12030082
- Neri, A., Butturi, M. A., & Gamberini, R. (2024). Sustainable management of electric vehicle battery remanufacturing: A systematic literature review and future directions. **Journal of Manufacturing Systems**, 77, 859–874. https://doi.org/10.1016/j.jmsy.2024.10.006
- Neri, A., Butturi, M. A., Lolli, F., & Gamberini, R. (2024). Enhancing Waste-to-Energy and Hydrogen Production through Urban–Industrial Symbiosis: A Multi-Objective Optimisation Model Incorporating a Bayesian Best-Worst Method. Smart Cities, 7(2), Article 2. https://doi.org/10.3390/smartcities7020030
- Neri, A., Butturi, M. A., Lolli, F., & Gamberini, R. (2023). Inter-firm exchanges, distributed renewable energy generation, and battery energy storage system integration via microgrids for energy symbiosis. **Journal of Cleaner Production**, 414, 137529. https://doi.org/10.1016/j.jclepro.2023.137529

Indexed Conference Proceedings

- Neri, A., Butturi, M. A., Sauer, H. L., Lolli, F., Gamberini, R., & Sellitto, M. A. (2024). Distributed Ledger Technology selection for Digital Battery Passport: A BWM-TOPSIS approach. IFAC-PapersOnLine, 58(19), 480–485. https://doi.org/10.1016/j.ifacol.2024.09.258
- Neri, A., Butturi, M. A., Scapinelli, A., Lolli, F., & Gamberini, R. (2024). Renewable Energy Communities in Rural Areas: A Hybrid GIS-MCDM Approach for Agrivoltaic Systems Site Selection. Proceedings of the Summer School Francesco Turco. 29th Summer School Francesco Turco. Article IN PRESS.
- Neri, A., Butturi, M. A., Bonini, F., Lolli, F., & Gamberini, R. (2024). *Blockchain-Based Carbon Emissions Tracking in Supply Chains: A Smart Contract Solution for Scope 3 Reporting.* **Proceedings of the Summer School Francesco Turco**. 29th Summer School Francesco Turco. Article IN PRESS.
- Neri, A., Butturi, M. A., da Silva, L. T., Lolli, F., Gamberini, R., & Sellitto, M. A. (2024). Exploring Industry 5.0 for Remanufacturing of Lithium-Ion Batteries in Electric Vehicles. Advances in Remanufacturing, https://doi.org/10.1007/978-3-031-52649-7_5

- Savian, F., Tomasin Da Silva, L., Sellitto, M., Sauer Oliveira, H. L., Neri, A., & Butturi, M. A. (2023). *Green Hydrogen, Industrial Symbiosis, And Blockchain: Enhancing Sustainability And Resilience In Supply Chains.* ECMS 2023 Proceedings Edited by Enrico Vicario, Romeo Bandinelli, Virginia Fani, Michele Mastroianni, 350–356. https://doi.org/10.7148/2023-0350
- Neri, A., Butturi, M. A., Lolli, F., & Gamberini, R. (2023). Empowering rural districts with Urban-Industrial Symbiosis: A multiobjective model for Waste-to-Energy cogeneration and hydrogen sustainable networks. Proceedings of the Summer School Francesco Turco. 28th Summer School Francesco Turco.
- 2022 Coruzzolo, A. M., Rossini, S., Neri, A., Lolli, F., Gamberini, R., & Regattieri, A. (2022). Semi-Automatic Rapid Upper Limb Assessment (RULA) with Azure Kinect of assembly and disassembly tasks, and the related learning curve. **Proceedings of the Summer School Francesco Turco**. 27th Summer School Francesco Turco.
- Butturi, M. A., Sellitto, M. A., Lolli, F., Balugani, E., & Neri, A. (2020). *A model for renewable energy symbiosis networks in eco-industrial parks.* **IFAC-PapersOnLine**, 53(2), 13137–13142. https://doi.org/10.1016/j.ifacol.2020.12.2504

Talks and tutorials

- Speaker, XXIX AIDI Summer School Francesco Turco

 September, 11-13 Otranto (Italy), "Blockchain-Based Carbon Emissions Tracking in

 Supply Chains: A Smart Contract Solution for Scope 3 Reporting" and "Renewable Energy

 Communities in Rural Areas: A Hybrid GIS-MCDM Approach for Agrivoltaic Systems

 Site Selection"
- 2024 Speaker, 18th IFAC Symposium on Information Control Problems in Manufacturing (INCOM 2024)

 August, 28-30 Vienna (Austria), "Distributed Ledger Technology Selection for Digital Battery Passport: A BWM-TOPSIS Approach"
- Speaker, Doctoral Workshop on "Advances in Manufacturing and Logistics management and control problems" (INCOM 2024)
 August, 27 Vienna (Austria), PhD Proposal: "Sustainable Battery Supply Chain and Resilient Energy Transition: From End-of-Life Electric Vehicle Batteries to Stationary Energy Storage Systems"

- Speaker, Advanced Topics in Production and Systems Engineering International Immersion
 - June, $21 S\~{a}o$ Leopoldo, Rio Grande do Sul (Brazil, Online), Seminar title: "Exploring Industry 5.0 for remanufacturing of lithium-ion batteries in electric vehicles"
- 2023 Speaker, VII International Workshop on Autonomous Remanufacturing
 October, 18-19 Caserta (Italy), "Exploring Industry 5.0 for remanufacturing of lithiumion batteries in electric vehicles"
- Speaker, XXVIII AIDI Summer School Francesco Turco
 September, 06-08 Genova (Italy), "Empowering rural districts with Urban-Industrial
 Symbiosis: A multi- objective model for Waste-to-Energy cogeneration and hydrogen
 sustainable networks"
- Speaker, XXVII Summer school Francesco Turco
 September, 07-09 Sanremo (Italy), "Empowering rural districts with Urban-Industrial
 Symbiosis: A multi-objective model for Waste-to-Energy cogeneration and hydrogen sustainable networks"

Honors and scholarships

- ISA Doctoral Prize II Edition 20232024 (Institute of Advanced Studies, University of Bologna)

 Research project: "Sustainable Energy Transition: Leveraging End-of-Life Electric Vehicle Batteries for Stationary Storage Systems".
- Best Paper DIN (Department of Industrial Engineering, University of Bologna)

 Paper title: "Inter-firm exchanges, distributed renewable energy generation, and battery energy storage system integration via microgrids for energy symbiosis".
- 2023 Best Paper Award (XXVIII AIDI Summer School "Francesco Turco", Genova, Italy)

 Paper Title: "Empowering rural districts with Urban- Industrial Symbiosis: A multiobjective model for Waste-to-Energy cogeneration and hydrogen sustainable networks"
- 2019 University Management Competition 2018/2019 (CESOP HR Consulting Group)

 *Rome (Italy), 08/05/2019