

# Curriculum Vitae: Prof. Dr.-Ing. Enzo Morosini Frazzon (\*29.08.1976)

University Professor

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## Scientific Background

- Since 2010 Professor at the Department of Industrial and Systems Engineering in the Federal University of Santa Catarina (UFSC)
- 2018-2019 Visiting Scholar at the Smart Production 4.0 Lab from the Department of Engineering and Architecture at the University of Parma, Italy
- 2009-2010 Postdoctoral Researcher at the Bremer Institut für Produktion und Logistik GmbH (BIBA) at the University of Bremen, Germany
- 2009 Dissertation - Doktor-Ingenieur (Dr.-Ing.) at the University of Bremen, *Magna cum Laude*  
Dissertation title: '*Sustainability and Effectiveness in Global Logistic Systems: An Approach Based on a Long-Term Learning Process*'
- 2004 Dissertation - Master in Engineering (M. Eng.) at the Federal University of Santa Catarina  
Dissertation title: '*Logistic Performance Evaluation in Urban Distribution of Goods: Methodological Contribution and Application*'
- 2003-2006 Research Coordinator and Leader at the Logistics and Transportation Laboratory at the Federal University of Santa Catarina
- 2002 MBA in Business Management at the IBMEC Business School
- 1998-2003 Professional Experience in positions dealing with the strategic planning, feasibility analysis, design and implementation of production and transportation systems, including intermodal integration, maritime transportation and port logistics in the following companies  
Volkswagen, Audi and ArcelorMittal
- 1998 Diploma degree in Mechanical Engineering, Federal University of Santa Catarina

## Research Projects (Selected)

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- 2016-2020 An Adaptive Simulation-based Optimization Approach for the Scheduling and Control of Dynamic Manufacturing Systems (AdaptiveSBO), Brazilian German Collaborative Research Initiative in Manufacturing Technology', BRAGECRIM Program, DFG/CAPES
- 2018-2022 Analysis of distributed and automated manufacturing lines for manufacturing customized medical treatment items. PII UFSC, PrInt Program, CAPES
- 2013-2019 Hybrid approaches for the real-time scheduling of transportation and logistics systems, CNPq Senior Researcher Grant
- 2012-2019 Brazilian Port Sector Planning and Implantation of Port Logistics Intelligence Projects (agreement UFSC and National Secretary of Ports)
- 2014-2015 Feasible Analysis for the Implantation of 16 Port Logistics Support Areas in 16 Brazilian Maritime Ports (agreement UFSC and National Secretary of Ports)

## Editorships (Selected)

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- 2018-2020 Editor-in-Chief of Production (the flagship journal of ABEPRO - Brazilian Association of Manufacturing and Industrial Engineering)
- 2017-2020 Editorial Board Member of the Journal of Manufacturing Systems, International Journal of Integrated Supply Management
- 2010-2017 Editor of '*Produção Online*' (the electronic online journal of ABEPRO - Brazilian Association of Manufacturing and Industrial Engineering)

## Memberships (Selected)

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- Since 2010 ABEPRO - Brazilian Association of Manufacturing and Industrial Engineering  
Member of the Editorial Steering Committee (NEA)
- Since 2016 International Federation of Automatic Control (IFAC)  
Technical Committee (TC) 5.2. Manufacturing Modelling for Management and Control  
Vice-Chair for Publication  
Chair of Working Group (WG) 'Intelligent methods and systems supporting supply chain decision making'
- Since 2016 University of Bremen in Brazil  
Research Ambassador of University of Bremen in Brazil

## Publication List (Selected)

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- Cavalcante, I. M.; **Frazzon, E. M.**; Forcellini, F. A. & Ivanov, D.. A supervised machine learning approach to data-driven simulation of resilient supplier selection in digital manufacturing. *International Journal of Information Management*, v. 49, p. 86-97, 2019.
- Frazzon, E. M.**, Kück, M., & Freitag, M. (2018). Data-driven production control for complex and dynamic manufacturing systems. *CIRP Annals*, 67 (1), 515-518.
- Frazzon, E. M.**, Albrecht, A., Pires, M., Israel, E., Kück, M., & Freitag, M. (2018). Hybrid approach for the integrated scheduling of production and transport processes along supply chains. *International Journal of Production Research*, 56(5), 2019-2035.
- Leusin, M., **Frazzon, E.**, Uriona Maldonado, M., Kück, M., & Freitag, M. (2018). Solving the Job-Shop Scheduling Problem in the Industry 4.0 Era. *Technologies*, 6(4), 107.
- Uhlmann, I. R., & **Frazzon, E. M.** (2018). Production rescheduling review: Opportunities for industrial integration and practical applications. *Journal of Manufacturing Systems*, 49, 186-193.
- Pereira, M. M., Machado, R. L., Pires, S. R. I., Dantas, M. J. P., Zaluski, P. R., & **Frazzon, E. M.** (2018). Forecasting scrap tires returns in closed-loop supply chains in Brazil. *Journal of Cleaner Production*, 188, 741-750.
- Trancoso, J. P. G., Piazza, V., & **Frazzon, E.** (2018). Simulation-Based Analysis of Additive Manufacturing Systems for Fuel Nozzles. *Journal of Aerospace Technology and Management*, 10.
- Castro, V.; **Frazzon, E. M.** (2017) Benchmarking of best practices: an overview of the academic literature. *Benchmarking (Bradford)*, v.24, p.750 - 774.
- Frazzon, E.**, Tortorella, G. L., Dávalos, R., Holtz, T., & Coelho, L. (2017). Simulation-based analysis of a supplier-manufacturer relationship in lean supply chains. *International Journal of Lean Six Sigma*, 8(3), 262-274.
- Avventuroso, G., Foresti, R., Silvestri, M., & **Frazzon, E. M.** (2017). Production paradigms for additive manufacturing systems: A simulation-based analysis. In *Engineering, Technology and Innovation (ICE/ITMC), 2017 International Conference on* (pp. 973-981). IEEE.
- Ehm, J.; Scholz-Reiter, B.; Makuschewitz, T.; **Frazzon, E. M.** (2015): Graph-based integrated production and intermodal transport scheduling with capacity restrictions. *CIRP Journal of Manufacturing Science and Technology*, v.9, 23-30.
- Isasi, N.K.G; **Frazzon, E. M.**; Maldonado, M. U. (2015): Big Data and Business Analytics in the Supply Chain: A Review of the Literature. *Revista IEEE América Latina*, v. 13, p. 3382-3391.
- Frazzon, E. M.**; Israel, E.; Albrecht, A.; Pereira, C. E.; Hellingrath, B. (2014): Spare parts supply chains operational planning using technical condition information from intelligent maintenance systems. *Annual Reviews in Control*, v. 38, p. 147-154.
- Frazzon, E. M.**; Hartmann, J.; Makuschewitz, T.; Scholz-Reiter, B. (2013): Towards socio-cyber-physical systems in production networks. *Procedia CIRP*, v.7, 49-54.
- Scholz-Reiter, B.; **Frazzon, E. M.**; Makuschewitz, T. (2010): Integrating manufacturing and logistic systems along global supply chains. *CIRP Journal of Manufacturing Science and Technology*, 2, pp. 216-223.