CURRICULUM VITAE

RESEARCH ACTIVITIES

Research activities in the field of risk and safety management for complex socio-technical systems (air traffic management, aviation, industrial plants, healthcare, maritime operations), with particular interest in the emerging field of resilience engineering. Further research activities in the inventory management and logistics domain.

- 06/2014 02/2018 **Research Assistant** at Sapienza University of Rome, Faculty of Civil and Industrial Engineering, Department of Mechanical and Aerospace Engineering.
- 01/2018 04/2018 **PhD Intern** at EUROCONTROL, Brussels (Belgium), NMD/NOM/SAF (Safety Unit). Working on the usability and applicability of TOKAI for safety investigation management. The project aimed at combining its operational application in collaboration with several EU Air Navigation Service Providers. The results of the research have been presented in several conferences and international events, and opened the path for a long-term agreement between Sapienza and Eurocontrol (signed in June 2018).

PUBLICATIONS

SCOPUS (updated 29 November 2019)	GOOGLE SCHOLAR (updated 29 November 2019)

H-index: 10 H-index: 11
Documents: 38 Documents: 50
Total citations: 300 Total citations: 410

2018-2019	Guest Editor - Com	nplexity (Hindawi), for the Specia	al Issue: Modelling and Quantifica	ition of Resilience in Complex
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Engineering Systems

2018-2019 Guest Editor - Sustainability (MDPI), for the Special Issue: "Inventory Management for Sustainable Industrial

Operations'

2018-2019 Guest Editor - Sustainability (MDPI), for the Special Issue: "Resilience Engineering for Sustainability:

Methodological Approaches and Practical Experience"

since 2018 Editor - Cogent Engineering (Taylor & Francis)

since 2017 Editorial board member - Journal of Safety Studies (MacroThink)

since 2017 Editorial board member - International Journal of Civil Aviation (MacroThink)

Scientific Board/Committee member

2019 - today	Resilience Engineering Assoc	iation (REA) Symposium,	Co-chair REA Young	Talent Committee
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2019 16th International Conference on Information Systems for Crisis Response and Management

(ISCRAM 2019) – Valencia (Spain)

2018 Interoperability for Crisis Management: Increasing Resilience of Smart Cities (ICRIM 2018) – Berlin (Germany)
2017 - 2019 8th Resilience Engineering Association (REA) Symposium, Young Talent Committee Member - Kalmar (Sweden)

2017 19th NTCA International Conference (New Trends in Civil Aviation) – Prague (Czech Republic)

2017 11th FRAMily meeting & workshop – Rome (Italy)

Reviewer

2019	8 th Resilience Engineering Association (REA) Symposium – Kalmar (Sweden)
since 2019	Applied Ergonomics (Elsevier)
since 2019	CRC Press, reviewer of book proposals (Taylor & Francis)
since 2019	Electronics (MDPI)
since 2019	J. of Computational Methods in Sciences and Engineering (IoS Press)
since 2019	J. of Contingencies and crisis management (Wiley)

since 2019 J. of Loss Prevention in the process industries (Elsevier) since 2019 Int. J. of Productions Economics (Elsevier)

since 2019 Inventions (MDPI)

2019 MLIS 2019 Int. Conf. on Machine Learning and Intelligent Systems – Hualien (Taiwan)

since 2019 Naval Research Logistics (Wiley) since 2019 Progress in Nuclear Energy (Elsevier)

S	ince 2019	Symmetry (MDPI)
S	ince 2019	The Open Transportation Journal (Bentham Open)
S	ince 2019	Water and Environment Journal (Elsevier)
S	ince 2018	Academy of Strategic Management Journal (Allied Journal)
S	ince 2018	Aerospace (MDPI)
S	ince 2018	Cogent Business & Management (Cogent OA)
S	ince 2018	Cogent Engineering (Taylor & Francis)
S	ince 2018	Computers & Industrial Engineering (Elsevier)
S	ince 2018	Energies (MDPI)
S	ince 2018	Entropy (MDPI)
S	ince 2018	Infrastructures (MDPI)
S	ince 2018	Int. J. of Environmental Research and Public Health (MDPI)
S	ince 2018	J. of Aerospace Information Systems (AIAA)
S	ince 2018	J. of Air Transport Management (Elsevier)
S	ince 2018	Safety (MDPI)
S	ince 2018	Sustainability (MDPI)
S	ince 2017	Cognition, Technology & Work (Springer)
S	ince 2017	Expert Systems With Applications (Elsevier)
S	ince 2017	Int. J. of Supply Chain and Inventory Management (Inderscience)
S	ince 2017	J. of Aerospace Information Systems (AIAA)
S	ince 2017	J. of Industrial Engineering and Management (OmniaScience)
S	ince 2017	J. of Safety Studies (MacroThink)
S	ince 2017	Kybernetes (Emerald Insight)
S	ince 2017	Reliability Engineering & System Safety (Elsevier)
S	ince 2017	The Open Cybernetics and Systemics Journal (Bentham Open)
S	ince 2016	Int. J. of Production Research (Taylor & Francis)
S	ince 2016	J. of Residuals Science & Technology (DEStech publication Inc)
S	ince 2016	PLOS One (Public Library of Science)
S	ince 2016	Safety Science (Elsevier)
S	ince 2016	Transportation Research Part E: Logistics and Transportation Review (Elsevier)
S	ince 2014	AIAA Region Australia-Asia Student Conference – AIAA Sydney Section (AIAA)

Main international journals (30)

- 1. Falegnami A., Costantino C., Di Gravio G., **Patriarca R.**, 2019. *Unveil key functions in socio-technical systems: Mapping FRAM into a multilayer network*, Cognition, Technology & Work, in press. doi: 10.1007/s10111-019-00612-0.
- 2. **Patriarca R.,** Hu T., Costantino F., Di Gravio G., Tronci M., 2019. *A System-Approach for Recoverable Spare Parts Management Using the Discrete Weibull Distribution*, Sustainability, vol.11, 5180, pp.1-15.
- 3. Adriaensen A., **Patriarca R.**, Smoker A., Bergstrom J., 2019. A socio-technical analysis of functional properties in a joint cognitive system. A case study in an aircraft cockpit, ISS: 0014-0139 (in press). doi: 10.1080/00140139.2019.1661527.
- 4. **Patriarca R.**, Di Gravio G., Costantino F., 2019. *Risk, safety, reliability and satellites: Chronicles of a fragmented research field.* Journal of Space Safety Engineering, ISSN 2468-8967, (in press). doi: 10.1016/j.jsse.2019.08.002.
- 5. **Patriarca, R.,** Di Gravio, G., Costantino, F., Fedele, L., Tronci, M., Bianchi, V., Caroletti, F., Bilotta, F., 2019. *Systemic safety management in anesthesiological practices,* Safety Science, Volume 118, Pages 551-567, ISSN 0925-7535, https://doi.org/10.1016/j.ssci.2019.08.021.
- Patriarca, R., Di Gravio, G., Cioponea, R., Licu, A., 2019. Safety intelligence: Incremental proactive risk management for holistic aviation safety performance. Safety Science, Volume 118, Pages 551-567, ISSN 0925-7535, https://doi.org/10.1016/j.ssci.2019.05.040.
- Patriarca R., Falegnami A., De Nicola A., Villani M.L., Paltrinieri N., 2019. Serious games for industrial safety: An approach
 for developing resilience early warning indicators. Safety Science, Volume 118, Pages 316-331, ISSN 0925-7535,
 https://doi.org/10.1016/j.ssci.2019.05.031.
- 8. **Patriarca R.**, Falegnami A., Bilotta F., (2018). *Embracing simplexity: the role of artificial intelligence in peri-procedural medical safety*. Expert Review of Medical Devices, ISSN 1743-4440, vol. 16 (2), pp. 77-79, doi: 10.1080/17434440.2019.1561269.
- 9. Menchinelli, A., Ingiosi, F., Pamphili, L., Marzioli, P., **Patriarca, R.**, Costantino, F., Piergentili, F., (2018). *A reliability engineering approach for managing risks in CubeSats*. Aerospace, ISSN 2226-4310, vol. 5 (4), pp. 1-24, doi: 10.3390/aerospace5040121.
- 10. Falegnami A., Bilotta F., Pugliese, F., Costantino F., Di Gravio, G., Tronci, M., **Patriarca R.**, (2018). *A multi-country comparative survey about organizational resilience in anesthesia*. Journal of Evaluation in Clinical Practice, ISSN 0951-8320, vol. 24 (6), pp. 1347-1357, doi: 10.1111/jep.13054.

- 11. **Patriarca R.**, Falegnami A., Costantino F., Bilotta F., (2018). *Resilience Engineering for socio-technical risk analaysis: application in neuro-surgery*. Reliability Engineering & System Safety, ISSN 0951-8320, vol. 180, pp. 321-335. doi: 10.1016/j.ress.2018.08.001.
- 12. Patriarca R., Falegnami, A., Di Gravio G., Costantino, F., Bilotta, F., (2018). *An analytic framework to assess organisational resilience*. Safety and Health at Work, ISSN: 2093-7911, vol. 9(3), pp. 265-276. doi: 10.1016/j.shaw.2017.10.005.
- 13. **Patriarca R.**, Bergström J., Di Gravio G., Costantino, F., (2018). *Resilience Engineering: current results and future challenges*. Safety Science, ISSN 0925-7535, vol. 102, pp. 79-100. doi: 10.1016/j.ssci.2017.10.005.
- 14. **Patriarca R.**, Di Gravio G., Costantino F., Tronci M., Severoni A., Vernile A., Bilotta F. (2017). *A paradigm shift to enhance patient safety in health care, a Resilience Engineering approach: scoping review of available evidence*. International Journal of Healthcare Technology and Management, ISSN 1741-5144, vol. 16 (3-4), pp. 319-343. doi: 10.1504/IJHTM.2017.088872.
- 15. Costantino, F., Di Gravio, G., **Patriarca R.**, Petrella L. (2018). *Spare parts management for irregular demand items*. OMEGA: The management science journal, ISSN 0305-0483, vol. 81, pp. 57-66. doi: 10.1016/j.omega.2017.09.009.
- Patriarca R., Del Pinto G., Di Gravio G., Costantino F., 2018. FRAM for systemic accident analysis: a matrix representation of functional resonance. International Journal of Reliability, Quality and Safety Engineering, ISSN 1793-6466. doi: 10.1142/S0218539318500018.
- 17. Patriarca R., Bergström J., 2017. Modelling complexity in everyday operations: Functional resonance in maritime mooring at quay. Cognition, Technology & Work, ISSN 1435-5566, vol. 19 (4), pp. 711-729. doi: 10.1007/s10111-017-0426-2.
- 18. Patriarca R., Bergström J., Di Gravio G., 2017. *Defining the functional resonance analysis space: Combining Abstraction Hierarchy and FRAM.* Reliability Engineering and System Safety, ISSN 0951-8320, vol. 165, pp. 34-46. doi: 10.1016/j.ress.2017.03.032.
- 19. **Patriarca R.**, Di Gravio G., Costantino F., 2017. *Resilience Engineering to assess risks for the Air Traffic Management system: a new systemic method.* International Journal of Reliability and Safety, vol. 16 (4), pp. 323-345, doi: 10.1504/IJRS.2016.10005344.
- 20. **Patriarca R.**, Di Gravio G., Costantino F., 2017. *A Monte Carlo evolution of the Functional Resonance Analysis Method (FRAM) to assess performance variability in complex systems*. Safety Science, ISSN 0925-7535, vol. 91, pp. 49-60. doi: 10.1016/j.ssci.2016.07.016.
- 21. **Patriarca R.**, Costantino F., Di Gravio G., & Tronci M., 2017. *The Functional Resonance Analysis Method for a systemic risk based environmental auditing in a sinter plant: A semi-quantitative approach*. Environmental Impact Assessment Review, ISSN 0195-9255, vol. 63, pp. 72-86. doi: 10.1016/j.eiar.2016.12.002.
- 22. Di Gravio G., **Patriarca R.**, Costantino F., Sikora I., 2017. *Safety assessment for an ATM system change: a methodology for the ANSPs*. PROMET Traffic & Transportation, ISSN 1848-4069, vol. 29 (1), pp. 99-107. doi: http://dx.doi.org/10.7307/ptt.v29i1.2121.
- 23. **Patriarca R.**, Di Gravio G., Mancini M., Costantino F., 2016. *Change management in the ATM system: integrating information in the Preliminary System Safety Assessment*. International Journal of Applied Decision Sciences, ISSN 1755-8085, vol. 9 (2), pp. 121-138. doi: 10.1504/IJADS.2016.10000985.
- 24. **Patriarca R.**, Costantino F., Di Gravio G., 2016. *Inventory model for a multi-echelon system with unidirectional lateral transshipment*. Expert Systems with Applications, ISSN 0957-4174, vol. 65, pp. 372-382. doi:10.1016/j.eswa.2016.09.001.
- 25. Costantino F., Di Gravio G., Nonino F., **Patriarca R.**, 2016. *Evolution of the intellectual structure of research on pricing strategy of low cost carriers*. Research in Transportation Business and Management, ISSN 2210-5395, vol. 21, pp.9 9-116. doi:10.1016/j.rtbm.2016.07.005.
- 26. **Patriarca R.**, Costantino F., Di Gravio G., Tronci M., 2016. *Inventory optimization for a customer airline in a performance based contract*. Journal of Air Transport Management, ISSN 0969-6997, vol. 57, pp. 206-216. doi:10.1016/j.jairtraman.2016.08.005.
- 27. **Patriarca R.**, Di Gravio G., Costantino F., 2016. Assessing performance variability of ground handlers to comply with airport quality standards. Journal of Air Transport Management, ISSN 0969-6997, vol. 57, pp. 1-6, doi: 10.1016/j.jairtraman.2016.06.009.
- 28. Di Gravio G., **Patriarca R.**, Mancini M., Costantino F., 2016. *Overall safety performance of the Air Traffic Management system: The Italian ANSP's experience on APF*. Research in Transportation Business and Management, ISSN 2210-5395, vol. 20, pp. 3-12, doi:10.1016/j.rtbm.2016.03.001.
- 29. Di Gravio G., Mancini M., **Patriarca R.**, Costantino F., 2015. *Overall safety performance of the Air Traffic Management system: indicators and analysis.* Journal of Air Transport Management, ISSN 0969-6997, vol. 44-45, pp. 65-69, doi: 10.1016/j.jairtraman.2015.02.005.
- 30. Di Gravio G., Mancini M., **Patriarca R.**, Costantino F., 2015. *Overall safety performance of Air Traffic Management system:* forecasting and monitoring. Safety Science, ISSN 0925-7535, vol. 72, pp. 351-362, doi: 10.1016/j.ssci.2014.10.003.

Main international conference proceedings (21)

- 1. Lališ, A., **Patriarca, R.**, Ahmadc, K., Di Gravio, G., Kostov, B., 2019. Functional modeling in safety by means of foundational ontologies, 8th International Conference on Air Transport INAIR 2019 Global Trends In Aviation, 12-13 November 2019, Budapest (Hungary).
- 2. Quatrini E., Costantino F., Di Gravio G., **Patriarca R.**, 2019. Load forecast for onboard high-speed railway catering service using machine learning, Proceedings of XXIV Summer School "Francesco Turco" Impianti Industriali Meccanici "Augmented Knowledge: A new era of industrial systems engineering", 11-13 September 2019, Brescia (Italy).
- 3. **Patriarca, R.,** Di Gravio, G., Costantino, F., Tronci, M., 2019. WHO? WHAT? WHERE? WHEN? A scientometric perspective on Resilience Engineering. 8th Resilience Engineering Association (REA) symposium. Kalmar (Sweden), 24-27 June 2019.

- 4. **Patriarca, R.,** Adriaensen, A., Peters, M., Putnam, J., Costantino, F., Di Gravio, G., 2019. Receipt and disptach of an aircraft. A functional risk analysis. 8th Resilience Engineering Association (REA) symposium. Kalmar (Sweden), 24-27 June 2019.
- 5. **Patriarca, R.,** Di Gravio, G., Costantino, F., 2019. Risk, Safety and Reliability in satellite operations: The intellectual structure of a research field. 10th IAASS Conference "Making safety happen", 15-17 May 2019 Los Angeles (California).
- 6. **Patriarca, R.**, Cioponea, R., Di Gravio, G., Licu, A., 2018. Managing safety data: the TOKAI experience for the ANSPs, 7th International Conference on Air Transport INAIR 2018, Hainburg an der Donau (Austria), 20-21 November 2018.
- Patriarca R., Di Gravio G., Costantino F., Tronci M. 2017. Project risk management in complex socio-technical systems: A resilience perspective. Proceedings of the 3rd PMI Italian Academic Workshop "Project Management: Driving Complexity", 20th -21st September 2018 Rome (Italy). ISBN 978-88-9377-086-6 Sapienza Università Editrice.
- 8. **Patriarca R.**, Falegnami A., De Nicola A., Villani M.L., Paltrinieri N., 2018. Gamification for industrial safety: an approach for developing resilience early warning indicators. 27th SRA-E conference "Risk & Uncertainty From Critical Thinking to Practical Impact", Ostersund (Sweden), 18-20 June 2018.
- Patriarca R., Di Gravio G., Costantino F., 2017. myFRAM: an open tool support for the Functional Resonance Analysis Method. 2017 2nd International Conference on System Reliability and Safety (ICSRS 2017), Milan (Italy), 20-22 December 2017.
- 10. **Patriarca R.,** 2018. New trends for risk and safety management in the aviation domain: A resilience engineering perspective. 19th international conference "New trends in civil aviation", 7-8 December 2018, Prague (Czech Republic) ISBN 978-0-8153-7602-6 CRC Press Proceedings and Monographs in Engineering, Water and Earth Sciences.
- 11. De Nicola A., Falegnami A., **Patriarca R.**, Vicoli G., Villani M.L., 2017. Enhancement of Safety Imagination in Socio-Technical Systems with Gamification and Computational Creativity. ESReDA 53rd Seminar "Enhancing Safety: the Challenge of Foresight", Ispra (Italy), 14-15 November 2017.
- 12. Adriaensen A., **Patriarca R.**, Smoker A., Bergstrom J. 2017. Can artefacts be analyzed as an agent by itself yes or no: what does Hutchins 'how does a cockpit remember its speeds' tell us. Proceedings of 7th REA Symposium, 26th-29th June 2017 Liege (Belgium).
- 13. **Patriarca R.**, Di Gravio G., Costantino F., Tronci M. 2017. FRAM to assess performance variability in everyday work: functional resonance in the railway domain. Proceedings of 7th REA Symposium, 26th-29th June 2017 Liege (Belgium).
- 14. Costantino F., Di Gravio G., **Patriarca R.,** Tronci M., 2017. *A systemic approach for spare parts management in a Performance Based Contract*. Proceedings of XXII Summer School "Francesco Turco": "Innovation and development in engineering applications" 13-15 September 2017, Mondello (Italy), ISBN 978-88-908649-0-2.
- 15. **Patriarca R.**, Di Gravio G., Costantino F., Tronci M., 2017. *An inventory management model to manage the stock level for irregular demand items*, ICCIE 2017: 19th International Conference on Computers and Industrial Engineering, 13th -14th July 2017, Stockholm (Sweden).
- 16. **Patriarca R.**, Costantino F., Di Gravio G., 2016. *Resilience Engineering for space missions safety assessment*. Proceedings of 8th IAASS Conference "Safety first, Safety for all", 18-20 May 2016 Melbourne (Florida).
- 17. Sikora I., **Patriarca R.**, Di Gravio G., Costantino F., 2016. *MARS A fresh look at risk assessment modelling and effective safety data communication*. Proceedings of Znanost I Razvitak Prometa (ZIRP 2016), 12 April 2016, Zagreb (Croatia), ISBN 978-953-243-081-3, pp.193-209.
- 18. Costantino F., Di Gravio G., **Patriarca R.,** Tronci M., 2015. *Simulation model of spare parts management in a commercial pool contract*. 5th International Conference of Production Engineering and Management, 1-2 October 2015, Trieste (Italy), ISBN 978-3-941645-11-0.
- 19. Di Gravio G., Mancini M., **Patriarca R.,** Costantino F., 2014. *ATM safety management: reactive and proactive indicators.* Proceedings of 4th SESAR Innovation Days (SIDs 2014) EUROCONTROL, 25-27 November 2014, Madrid (Spain), ISBN 978-2-87497-077-1.
- 20. Costantino F., Di Gravio G., **Patriarca R.,** Tronci M., 2014. *Spare parts inventory control model for the aeronautical industry.* Proceedings of XIX Summer School "Francesco Turco": "A challenge for the future" 9-12 September 2014, Senigallia (Italy), ISBN 978-88-908649-1-9.
- 21. **Patriarca R.,** 2014. Forecasting overall safety performance of Air Traffic Management System. Proceedings of 10th Pegasus AIAA Student Conference, Prague (Czech Republic), 23-25 April 2015, ISBN 978-80-01-05459-8, 2014.

Keynote Speechs and other magazines (5)

- 1. **Patriarca R.,** 2019. *Safety Intelligence dashboards*. Safety & Security Conference, 20-21 November 2019, Prague (Czech Republic) keynote speech
- 2. **Patriarca R.,** 2018. *Failure is always an option: shifting from linear to complex analyses.* Safety & Security Conference, 21-22 November 2018, Prague (Czech Republic) keynote speech
- 3. **Patriarca R.,** 2018. New trends for risk and safety management in the aviation domain: A resilience engineering perspective. 19th international conference "New trends in civil aviation", 7-8 December 2018, Prague (Czech Republic) keynote speech
- 4. **Patriarca R.,** 2016. *Dynamic safety models for space safety.* Space Safety Magazine, 11 July 2016, online reference: http://www.spacesafetymagazine.com/magazine/dynamic-models-enhance-space-safety/ online magazine
- 5. **Patriarca R.,** 2016. *Il punto di vista sulla safety: Safety-I vs Safety-II.* SAFEBULL ENAV S.p.A. Safety journal, Vol. 9/2015 (in Italian) ENAV safety magazine

RESEARCH AWARDS

10/2019 Premio Italia Giovane 2019. 10 Under 35 Italians are awarded for "[...] their professional, artistic, or scientific achievement, as examples of enthusiasm, positivity, courage and professionalism". 04/2019 Forbes Italia 100 Young leaders of the future (category: science). Riccardo has been nominated as one of the 100 Italian young leaders of the future (category: science) for his research in risk, safety and resilience management. In particular, Riccardo is one of the 5 Italian in the category "Science". 03/2016 Winner of the 2019 International Association for Advancements of Space Safety and Space Generation Advisory Council scholarship. The scholarship was provided for best papers submitted the 10th IAASS Conference "Making safety happen" (scheduled for: 14-17 May 2019, Los Angeles, California). 02/2019 Forbes 30 Under 30 Europe (category: science and healthcare). Riccardo has been listed as one of "[...] the most revolutionary European entrepreneurs, innovators and disruptors [...], who are changing the game throughout the region and across the globe". 12/2018 SESAR Young Scientist Award (2nd place). SESAR is a collaborative project to completely overhaul European airspace and European Air Traffic Management (ATM). SESAR Joint Undertaking manages the selection process and awarded the best three ATM researchers of 2018. 12/2017 "Minerva Award" – Award for best scientific PhD research at Sapienza University of Rome. An award is assigned for each macro-research field. 11/2017 RAeS Young Person Award for the exceptional achievement and promise in aerospace, awarded by the Royal Aerospace Society (RAeS), counting on the results of his Phd research project. 05/2016 Winner of the 2016 International Association for Advancements of Space Safety and Space Generation Advisory Council scholarship. The scholarship was provided to three researchers authors of the three best technical submission for the 8th IAASS Conference "Safety first, Safety for all" (18-20 May 2016, Melbourne, Florida). 11/2015 SESAR Certificate of Scientific Excellence. SESAR is a collaborative project to completely overhaul European airspace and European Air Traffic Management (ATM). SESAR Joint Undertaking manages the selection process and awarded the best three ATM researchers of 2015. 11/2014 Three-year full time fellowship for the PhD in "Industrial and Management Engineering" at Sapienza University 03/2014 European Pegasus Certified Honours Degree at Pegasus Network. Pegasus is the European network of excellence in aerospace engineering academic field.

TEACHING ACTIVITIES

02/2019 - today Adjunct Lecturer

Sapienza University of Rome (Italy), Faculty of Information Engineering, Informatics, and Statistics.

(a.a. 2018 - 2019): "Industrial Plants" for the BSc in Mechanical Engineering.

(a.a. 2019 - 2020): "Operations Management" for the MSc in Mechanical Engineering (to be taught in English).

01/2016 - today Lecturer

Sapienza University of Rome (Italy), Faculty of Information Engineering, Informatics, and Statistics.

(a.a. 2017 - 2018): "Maintainability and Availability"; "Maintenance Strategies" for the Second level Master Degree in "Logistics and communication services for complex systems".

(a.a. 2016 - 2018): "Quality management" for the Second level Master Degree in "Logistics and communication services for complex systems".

(a.a. 2015 - 2019): "Maintenance management and Supply Chain Management" for the Second level Master Degree in "Logistics and communication services for complex systems".

Sapienza University of Rome (Italy) - INAIL (National Institute for Insurance against Accident at Work).

(a.a. 2017 - 2018): "Resilience Engineering for complex socio-technical systems" for the Second level Master Degree in "Health and Safety Systemic management in the evolving work domain".

11/2017 - today Guest Lecturer

Lund University (Sweden), Faculty of Engineering.

(a.a. 2017 - 2019): "Risk assessment in the safety area" for the Master of Science in "Risk Management".

(a.a. 2018 - 2019): "Research Methodologies: Modelling (and visualising) the dynamics of high-risk systems" for the Master of Science in "Human Factors and System Safety".

01/2015 - today MSc/BSc Thesis supervisor/co-supervisor

Sapienza University of Rome (Italy), Faculty of Civil and Industrial Engineering and Faculty of Information Engineering, Informatics, and Statistics.

Sapienza University of Rome (Italy), Faculty of Civil and Industrial Engineering and Faculty of Information Engineering, Informatics, and Statistics.

(a.a. 2014 - 2017): "Operations Management"; "Quality Management"; "Industrial plants" for the MSc and BSc in Mechanical Engineering, and for the BSc and MSc in Management Engineering.

EDUCATION AND QUALIFICATION

since 06/2018 National Scientific Qualification as Associate Professor in the scientific field: Industrial Systems Engineering.

2014 - 2017 **PhD in "Industrial and Management Engineering"** at Sapienza University of Rome (Italy) — Department of Mechanical and Aerospace Engineering.

PhD program focused on risk management and resilience engineering for complex systems. The research aims at developing innovative risk and safety management methods to increase the resilience of complex socio-technical systems to external and internal disruptions. Application domains: industrial plants, Air Traffic Management system, healthcare, maritime operations, space missions, railway.

Thesis: "Developing risk and safety management methods for complex socio-technical systems - from Newtonian reasoning to Resilience Engineering".

06/2016 - 11/2016 Visiting PhD Student Research at Lund University (Sweden) - Division of Risk Management and Societal Safety.

Research activities on developing the usability of the Functional Resonance Analysis Method (FRAM) to increase the comprehensibility of the method and allow reliable risk assessments and accident analyses. Research application in operations management in the maritime domain in collaboration with the Danish Maritime Accident Investigation Board (DMAIB) and in the aviation context (technical human interactions among pilots in the cockpit).

2014 MSc in Aeronautical Engineering at Sapienza University of Rome (Italy).

Education as a system engineer capable of integrating competences in telecommunication, navigation, surveillance and maintenance management for the aviation sector. Specialization in risk management for the Air Traffic Control (ATC) and in aircraft maintenance. *Thesis*: "Forecasting overall safety performance of the Air Traffic Management System".

2011 BSc in Aerospace Engineering at Sapienza University of Rome (Italy).

The course offers a solid basic knowledge of technical topics, such as math analysis, physics, aerodynamics, structure, propulsion and flight mechanics. *Thesis:* "Feasibility study of a flapping UAV".

2008 High School (Classical Studies) at public Liceum "V.Simoncelli" in Sora (Italy).

POSTGRADUATE EDUCATION COURSES

11/2016 Advanced methods for reliability, availability, maintainability, diagnostics and prognostics of industrial

equipment at POLIMI, Politecnico di Milano (Italy). The course, directed by prof. Enrico Zio offers detailed analytic insights into reliability, availability, maintainability, diagnostics and prognostics representation of technical

equipment.

06/2016 Learning Lab – From human error to second victim at Lund University (Sweden).

The course, held by prof. Sydney Dekker offers an in-depth analysis of second victim, just culture and drift into

failure concepts, with several industrial insights.

01/2016 Learning Lab – Critical thinking into safety at Lund University (Sweden).

The course, directed by prof. Johan Bergstrom offers a new perspective on how to recognize and describe phenomena such as cognitive fixation, plan continuation, automation surprises, normalization of deviance,

procedural drift and system resilience.

COMPETENCES

Languages - Italian: mother tongue

- English: C2 - French: B1

Rome, 29th November 2019