Ada **MALAGNINO**
Civil Engineer, PhD

WORK EXPERIENCE

Today — **SAFETY ENGINEER, CERN**
sep 2025 > definition of the safety concept of the FUTURE CIRCULAR COLLIDER (FCC)

AUG2025 — **Team Leader of the Custom Engineering area, GAE ENGINEERING, Turin, Italy**
May 2023

- Fire Risk Assessment (e.g. Einstein Telescope, Sardinia Region, Italy).
- Risk Assessment for Safety in Construction sites (e.g. UnipolSai Tower's façade maintenance, Milan) and Event Safety (e.g. Eurovision 2022, Turin)
- Fire safety design of complex projects (e.g. The new Milan stadium, San Donato (MI))
- Forensic engineering/tribunals : crowd management and fire safety (e.g. Piazza San Carlo stampede in 2017, Turin, and Fiumicino airport fire in 2015, Rome).
- Management of the team and its activities
- Technical coordination of a FSE section in the national magazine Antincendio and management of other editorial collaborations.

Today — **R&D Manager, GAE ENGINEERING, Turin, Italy**
March 2021

- Project Management activities in a national project aiming at the digitalization of the italian fire code.
- Life Cycle Assessment of PE and TE Energy Harvesting technology, task leader in the FAST SMART H2020 Project.
- European project proposals writing and coordination.
- Other activities : writing scientific papers, presentations at international conferences, theses supervisor, teaching assistant.

February 2021 — **Research fellow, UNIVERSITY OF SALENTO, Lecce, Italy**
November 2019

- Collaboration for the design and development of technological solutions for a public administration, regional project BIM at ARCA.
- Communication management, regional project BIM at ARCA.
- Research activities on Big Data, national project OK-INSAID.
- Collaborator in the national project "BIM for Rail LCA".
- Writing and Coordination of research projects about the digital transformation (regional, national and European projects).
- Academic activities : theses supervisor, writing scientific papers, presentations at international conferences.

November 2019 — **PhD Candidate, UNIVERSITY OF SALENTO, Lecce, Italy**
November 2016

- Research activities related to Fire Risk Assessment and Building Information Modeling.
- Writing research projects about the digital transformation (regional, national and European projects).
- Academic activities : theses supervisor, writing scientific papers, presentations at international conferences, teaching assistant.

October 2015 — **Trainee | Production Management, OFFICINA CREATIVA, Lecce, Italy**
June 2015

- Analysis of the company production processes. Definition of functional requirements for the development of a production management software and testing.
- Training of employees on the use of the software.

December 2014 – September 2014 | **Trainee | Project Management, 3F Group, Paris, France**

› Project Manager Apprentice. 3F Group owns and manages more than 255000 social housing units. It is in charge of the design, construction, management and demolition of the built asset.

Education

2020 PhD in Complex System Engineering, thesis title : "Integrating statistics based Fire Risk Assessment with Building Lifecycle Management", University of Salento

2019 Visiting PhD student at Aalto University (Finland) -10 months- in the Fire Safety Engineering research group, Prof. Simo Hostikka

2016 Master Degree in Civil Engineering Laurea Magistralis - 110/110 magna cum laude, thesis title : Analysis and possible integration between Building Information Modeling (BIM) and Product Lifecycle Management (PLM) : the case study of a real estate company, University of Salento

2014 Winner of a scholarship - Erasmus Placement Program, internship at 3F Group, Paris, France

2011 Bachelor Degree in Civil Engineering - 108/110, thesis title : Microclimatic analysis of an urban area, University of Salento

Training

2024 edX Verified Certificate for Data Science : Probability, Prof. Rafael Irizarry, Harvard University (online).

2022 "Corso Base di Specializzazione in Prevenzione Incendi" (Abilitation course to become a fire safety engineer in Italy), University of Ferrara

2022 RAM&PHM 4.0 : Advanced methods for Reliability, Availability, Maintainability, Prognostics and Health Management of industrial equipment, 31 hours course, Politecnico di Milano, Department of Energy

2021 Life Cycle Assessment and Life Cycle Costing, 2B Srl

2019 Fire Dynamics and Simulation, Prof. Simo Hostikka, Aalto University

2020 BIM Manager Course, Iperboole

2019 BIM Operator Course, Iperboole

2018 Business Integrated Management, Prof. Angelo Corallo, University of Salento

2018 Data analysis, Dr. Julian Rautenberg, Bergische Universitaet Wuppertal, Germany

Computer skills and competences

Programming, scripting and mark up languages	LateX/TeX, R, basic knowledge of FORTRAN
Software for Fire and Evacuation simulation	FDS+Evac, Pyrosim, Pathfinder
Software for Structural analysis and design	SAP2000
Computer-Aided Design	Sketchup, Archicad, Autocad, Revit
Process Modelling tools	Signavio, Draw.io (BPMN language)
Life cycle assessment (LCA)	Simapro

Languages

Italian	●●●●●
English	●●●●○
French	●●○○○

Prize

2023 Best papers of 2022 - Fire Technology Journal

2020 AiFOS Foundation prize for Best PhD Thesis on Safety

2020 CAE Conference Poster Award

2018 CAE Conference Poster Award

Academic Activities

Educational activities 2016-2022

2022- Today	Teaching assistant - ”Risk analysis and management” in the Fire Safety Engineering master Programme - University of Bolzano (Lecturer Fabio Dattilo)
2022-2023	Teaching assistant - ”Safety and security of tall buildings” in the IUAV Master Programme on Tall Buildings (Lecturer Giuseppe Amaro)
2022	Teaching assistant for lessons on fire safety in the SOS-School of Sustainability by Mario Cucinella Architects (Lecturer Giuseppe Amaro)
2017-2022	Advisor of 2 Master’s Degree Thesis in Civil Engineering, 1 Master’s Degree Thesis in Management Engineering, 2 Master’s Degree Thesis in Nuclear and Energy Engineering, 1 Bachelor’s degree thesis in Industrial Engineering)
2017-2018	Tutor for the course of Business Integrated Management, University of Salento (Prof. Angelo Corallo)
2016-2018	Teaching assistant/Tutor for the course of Mechanics of Solids-Structural Mechanics, University of Salento (Prof. Giorgio Zavarise)
2016-2018	Teaching assistant/Tutor for the course of Mechanics of Solids and Structures II, University of Salento (Prof. Francesco Paolo Pinnola)

Further information

Academic Membership	- AIMETA : fellow of the Italian Association of Theoretical and Applied Mechanics, from 2016. - AiIG : fellow of the Italian Association of Management Engineering, 2017-2018.
Professional Membership	- Italian Professional Engineer : member of the Order of Engineer of Brindisi, from 2017.

I authorize the processing of personal data contained in my curriculum vitae according to art. 13 D. Lgs. 196/2003 and art. 13 GDPR 679/16.

Ada Malagnino

Ada **MALAGNINO**
Ingegnere Civile, PhD

PUBLICATIONS

PAPERS AND PROCEEDINGS OF INTERNATIONAL CONFERENCES

1. Cristiani, E.; Menci, M.; MALAGNINO, A.; Amaro, G.G. (2023) *An all-densities pedestrian simulator based on a dynamic evaluation of the interpersonal distances*, Physica A : Statistical Mechanics and its applications, `https://doi.org/10.1016/j.physa.2023.128625`
2. MALAGNINO, A.; Corallo, A.; Lazoi, M.; Zavarise, G. (2022) *The digital transformation in Fire Safety Engineering over the past decade through Building Information Modelling : a Review*, Fire Technology Journal, *among best papers 2022* `https://doi.org/10.1007/s10694-022-01313-3`
3. Corallo, A.; Lazoi, M.; MALAGNINO, A.; Mangia, M.; Mangialardi, G.; Sarcinella, M.L. (2022) *Management of the maintenance process in social housing : A case study*, Knowledge and Process Management Journal, `https://doi.org/10.1002/kpm.1741`
4. Amaro, G.G.; MALAGNINO, A. (2022) *Crowd density in Open-Air Public Spaces : new perspectives from the application of forensic engineering to Piazza San Carlo Tragedy in Turin, 2017*, 14th International Performance-Based Codes and Fire Safety Design Methods Conference (SFPEPBD22), Virtual.
5. MALAGNINO, A.; Montanaro, T.; Lazoi, M.; Serigi, I.; Corallo, A.; Patrono, L. (2021) *Building Information Modeling and Internet of Things integration for smart and sustainable environments : A review*, Journal of Cleaner Production 312(8):127716, `DOI:10.1016/j.jclepro.2021.127716`.
6. Amaro, G.G.; Ferretti, M.; MALAGNINO, A.; (2021) *Comparison of Water Mist and Sprinkler Systems to ensure Fire Safety for the Bonnet Tower*, 20th International Conference on Water Mist (IWMC2021), Warsaw, Poland.
7. MALAGNINO, A.; Rostagno, M.; Amaro, G.G.; Vlysidis, A.; Gkika, A.; Koumoulos, E.; Qin, Y. (2021); LCA and LCC of Emerging and Incumbent Technologies on Energy Harvesters, International Conference on Raw Materials and Circular Economy (RawMat2021), Materials Proceedings. 2021; 5(1):21, `https://doi.org/10.3390/materproc2021005021`.
8. Sergi, I.; MALAGNINO, A.; Conte Rosito, R.; La Casa, V.; Corallo, A.; Patrono, L. (2020) *Integrating BIM and IoT Technologies in Innovative Fire Detection Systems*, 5th International Conference on Smart and Sustainable Technologies 2020 : SpliTech 2020, Split and Bol, Croazia, `DOI:10.23919/SpliTech49282.2020.9243838`.
9. MALAGNINO A., Hostikka S., Zavarise G., Corallo A. (2019) *A Statistics based Fire Risk Assessment methodology to support decisions in building life-cycle management*, Rescue Services Research Days 2019, Kuopio, Finland, *Published in conference proceedings*.
10. MALAGNINO A., Mangialardi G., Zavarise G., Corallo A. (2017) *From traditional Construction Industry Process Management to Building Lifecycle Management*, PLM '17 International Conference on Product Lifecycle Management, July 10-12, Seville, Spain, `DOI:10.1007/978-3-319-72905-3_30`.

POSTER FOR INTERNATIONAL CONFERENCES

1. MALAGNINO A., Corallo A., Zavarise G., Hostikka S. (2020) *Life Safety Assessment in multi-storey building fires*, CAE 2020 - International CAE Conference, November 30- December 2020, Virtual Conference *Winner of Poster Award*.
2. De Rinaldis M., MALAGNINO A., Gori S., Spagnolo M., Zavarise G. (2018) *Numerical simulations for road tunnels fire safety*, CAE 2018 - International CAE Conference, November 8-9, Vicenza, Italy, *Winner of Poster Award*.

MAGAZINE, PRESS AND NEWSLETTERS

1. Amaro, G.G.; La Placa, F.; MALAGNINO, A. *Il Codice di Prevenzione Incendi in pratica : Caso studio su attività ricettiva*, Antincendio magazine, EPC, March 2023.
2. Amaro, G.G.; Politi, C.; MALAGNINO, A. *Il comportamento della folla a Seul - Una situazione imprevedibile ?*, Antincendio magazine, EPC, January 2023.
3. Kallada Janardhan, R.; MALAGNINO, A.; D'Anna, S.; Amaro, G.G. *Incendi in discariche, depositi e strutture simili all'aperto : Cause e misure di prevenzione*, Antincendio magazine, EPC, September 2022.
4. Amaro, G.G.; D'Anna, S.; MALAGNINO, A. *Ottimizzazione dei sistemi di controllo di fumo e calore con strumenti di Fire Safety Engineering*, Antincendio magazine, EPC, February 2022.
5. Amaro, G.G.; MALAGNINO, A.; Ferretti, M. *Confronto tra sistemi water mist e sprinkler per la sicurezza antincendio della Torre di Corso Como Place*, Antincendio magazine, EPC, January 2022.
6. MALAGNINO, A.; Hostikka, S.; Zavarise, G.; Corallo, A. *Life-safety assessment of a hotel using fire and evacuation simulations. Improving Building Lifecycle Management by integrating technological developments and advances in knowledge of fire dynamics*, Enginsoft newsletter, year 17, n. 4, Winter 2020.
7. De Rinaldis, M.; MALAGNINO, A.;Gori, S. *Using CAE to support fire safety engineering in the Condó road tunnel. An important role for numerical simulation in risk management*, Enginsoft newsletter, year 15, n. 2, Summer 2018.