EUROPEAN CURRICULUM VITAE FORMAT

PERSONAL INFORMATION

Name	Margherita Bernabei
Personal address	
Business address	
Telephone number	
E-mail	
Nationality	Italian
Birthday	

EDUCATION AND WORK EXPERIENCES

(2021 – In progress)
PhD in Industrial and Management Engineering at the Department of Mechanical and Aerospace Engineering - University of Rome "La Sapienza".

(April 2021 – October 2021)
Fellowship for the Research Activity "Analysis And Development Of Supporting Tool For Digital Twin Implementation In A Smart Manufacturing Environment" at the Department of Mechanical And Aerospace Engineering - University of Rome "La Sapienza".

(February 2021 – August 2021)
Extracurricular internship program at AGIC Innovation - innovative Start-Up operating in the field of research and development of Machine Learning and Cognitive Tools solutions applied to business Artificial Intelligence (AI) platforms.
https://www.agicinnovation.com/

o Projects

(2022)
Collaboration in: "Study of a technological solution for predictive maintenance" at ABB S.p.A. (Frosinone, Rome) – University of Rome La Sapienza.
The project involves the definition and implementation of a predictive maintenance model involving the critical elements (i.e., the gear unit and motor) of a rotary table (model TA 35) deployed in the plate welding process on the XT1 relay production line

Collaboration in: "ESA Smart Manufacturing For Future Constellations at RUAG Space – RUAG Space, University of Rome "La Sapienza", and ThalesAlenia Space.
The project involves the study and the implementation of a CPSs-based architecture for data collection and analysis in the sandwich panel production process.

Collaboration in: "Digitalization of Linköping Production Line" - Technology Study at RUAG Space - University of Rome La Sapienza.

The consulting project for RUAG Space aims to achieve a structured digitalization of the new production facility and reach the following objectives using digital enablers: ensure efficient shopfloor management; provide transparency to the full production chain and enable analytics; ensure high manufacturing performances & Integrate Quality Control; ensure efficient hardware management.

Team member in: "Tradars project (digital transformation - analysis - risks - security)", BRIC ID 50 – Department of Mechanical and Aerospace Engineering, "La Sapienza", University of Turin UniTo, LUMSA University and the National Institute for Insurance against Accidents at Work (INAIL).
Analysis and implementation of tools to timely respond to the impacts that digitization may have on workers H&S, identifying priorities for action and defining specific mitigation measures to address new and emerging risks. Design of a Resilience-Engiveering based analysis to assess organizations' digitization.

Team member in: "BonsApp call for proposal"- A continuation of the EU-funded Bonseyes project aiming at enabling Europe to become a leading global player in the coming "AI-as-a-Service" economy.
The project proposal consists of the AROMA solution (App for zeRO defects in Manufacturing), proposed by Agic Innovation and the Department of Mechanical and Aerospace Engineering of the University of Rome "La Sapienza".

(2023)
Collaboration in: "AS Roma - Retail B&M Internal Logistic Services", University of Rome La Sapienza – in collaboration with As Roma Soccer Club

Responsible for: Research Initiation Projects - Type 1 - Year 2022 for the own projection titled "Adaptive Automation in smart and collaborative manufacturing contexts", University of Rome La Sapienza

Collaboration in: "ORIENTAMENTO NEXT GENERATION – Università La Sapienza" founded by the "Piano Nazionale di Ripresa e Resilienza (PNRR)".

(2024)
Collaboration in: "Business models and tools for entrepreneurship (MUSAS project)" – University of Rome La Sapienza.

Collaboration in: "Production system layout analysis - Review of the project for the relocation and optimisation of the production lines Zecca and Officina Carte Valori at the Polo Salario site"– University of Rome La Sapienza

Collaboration in: "ORIENTAMENTO NEXT GENERATION – Università La Sapienza" founded by the "Piano Nazionale di Ripresa e Resilienza (PNRR)".

Collaboration in: "Artificial Intelligence For Emergencies Services (AI4ES)", University of Rome La Sapienza - in collaboration with ISED, Geosystems, Regione Lazio (Lazio Innova).

o Projects Organizational Committee

(2023)
Organizational head of Tra.d.a.r.s. national congress "The evolution of organizations for managing health and safety risks in digital contexts." (May 2023)

o Reviewer

Reviewer for Computers and Industrial Engineering (CAIE) – International and Scopus Indexed Journal

Reviewer for Cogent Engineering (CE) - International and Scopus Indexed Journal

Reviewer for Global Journal of Flexible System Management (GJFSM)- International and Scopus Indexed Journal

Reviewer for Expert System With Applications (ESWA) – International and Scopus Indexed Journal

Reviewer for XXXIII AiIG Scientific Meeting (RSA AiIG 2022) – International Conference

Reviewer for International Forum on Knowledge Asset Dynamics (IFKAD, 2023) – International Conference

Reviewer for British Journal of Educational Technology - International and Scopus Indexed Journal

o Award

(2021)
Award "Outstanding Student Leadership Award" – 4th European Conference on Industrial Engineering & Operations Management (IOEM) – (Host: University of Rome "La Sapienza")

(2022)
Award "Outstanding Student Leadership Award" – 5th European Conference on Industrial Engineering & Operations Management (IOEM) – (Host: University of Rome "La Sapienza").

o Post-graduate courses

(2022)
"Resilience Engineering for the analysis of Industrial Plants". Lasting 12 hours - University "La Sapienza" (14-21-28/04/2022)

(2023)
"Research topics in Manufacturing and Service Operations Management (M&SOM), lasting 15 hours - Bergamo University, Scuola di Alta Formazione Dottorale (16-17-22-23-27/02/2023)

o Training Activities

(2021)
"CAPM - The Road to Project Management" delivered by the Central Italy Chapter of the Project Management Institute (PMI) and La Sapienza University

(2022)
Dalla ricerca all'innovazione: imprenditoria femminile o quando il futuro è rosa – Webinar

BonsApp Workshops and training activities – Workshop Datatool AI Asset BonsApp

The Convergence of Artificial Intelligence, Cyber Physical Systems, The Continuum of computing: the next evolution of Internet – Webinar

Applying Digital Intelligent Assistant in Manufacturing (3 sessions) – Webinar

Use cases and demonstrators of Digitalisation of Manufacturing – Webinar

Cybersecurity issues associated with manufacturing – Webinar

Resilience Engineering for the analysis of Industrial Plants, PHD-NET IN INDUSTRIAL SYSTEMS ENGINEERING - Virtual PhD school promoted by ING-IND/17, University of Rome "La Sapienza".

From shareholder to stakeholder value: Industry 5.0 human-centric, sustainable, and resilient – European Commission.

Design for Resilient Performance: principles and practices for the management of organizational resilience – Prof. Nicola Paltrinieri.

Risk and safety of hydrogen technologies in the framework of climate change.

(2023)

Research topic in Manufacturing and Service Operations Management (M&SOM) - PhD-Net AIDI – UniBG, Prof Paolo Gaiardelli, Prof. Roberto Pinto, Prof.ssa Fabiana Pirola, Prof. Adalberto Polenghi, Dr. Roberto Sala.

Research topic in Manufacturing and Service Operations Management (M&SOM) – Asset Management, PhD-Net AIDI – UniBG, Prof Paolo Gaiardelli, Prof. Roberto Pinto, Prof.ssa Fabiana Pirola, Prof. Adalberto Polenghi, Dr. Roberto Sala.

Research topic in Manufacturing and Service Operations Management (M&SOM) – Digital Supply Chain, PhD-Net AIDI – UniBG, Prof Paolo Gaiardelli, Prof. Roberto Pinto, Prof.ssa Fabiana Pirola, Prof. Adalberto Polenghi, Dr. Roberto Sala.

Research topic in Manufacturing and Service Operations Management (M&SOM) – Lean 4.0, PhD-Net AIDI – UniBG, Prof Paolo Gaiardelli, Prof. Roberto Pinto, Prof.ssa Fabiana Pirola, Prof. Adalberto Polenghi, Dr. Roberto Sala.

Research topic in Manufacturing and Service Operations Management (M&SOM) – PSS, PhD-Net AIDI – UniBG, Prof Paolo Gaiardelli, Prof. Roberto Pinto, Prof.ssa Fabiana Pirola, Prof. Adalberto Polenghi, Dr. Roberto Sala.

Unlocking the Potential of Meteorological Data: From Tradition to Innovation – Dr. David Sladek

- o Conferences

(2021)
72nd International Astronautical Congress 2021 – Dubai, United Arab Emirate

(2022)
22nd International Working Seminar on Production Economics, 2022 – Innsbruck, Austria

5th European Industrial Engineering and Operations Management Conference – Rome, Italy

IX PhD On the Go 2022 "Marco Garretti" – Benevento, Italy.

XXVII Summer School "Francesco Turco" – Industrial Systems Engineering – Sanremo, Italy

International Conference - The Science and Development of Transport ZIRP 2022 – Sibenik, Croatia

(2023)
X PhD On the Go 2023 "Marco Garretti" – Pula, Italy.

IFAC World Congress 2023 – Yokohama, Japan.

XXVIII Summer School "Francesco Turco" – Blue, Resilient & Sustainable Supply Chains: The Role of Industrial Plants in Procurement, Production and Distribution – Genova, Italy

(2024)
14th International Conference on Methodologies and Intelligent Systems for Technology Enhanced Learning (mis4TEL) – Salamanca, Spain

World Conference on Smart Trends in Systems, Security and Sustainability (WorldS4 2024) – London, UK.

- o Scientific Board

(2024)
International Conference on Industry 4.0 and Smart Manufacturing (ISM 2024) – Prague, Czech Republic

- o Track proposal and management

(2024)
"Adaptive automation for human-centric manufacturing" (Bernabei M., Colabianchi S.) - International Conference on Industry 4.0 and Smart Manufacturing (ISM 2024)

o Publications

Books
(2022)
"Nuovi modelli per la gestione della sicurezza sul lavoro con i cobot" in "Robot e cobot nell'impresa e nella scuola: processi formativi e trasformativi nella workplace innovation" (Bernabei M., Costantino F., Falegnami A., Stabile S.) – Franco Angeli Editore

(2023)
"Trasformazione digitale tra opportunità, rischi e mitigazione" (Bentivenga R., Bernabei M., Costantino F., ; Della Rina D., Falegnami A., Fedele L., Isceri M., Luppi R., Macioce F., Maule E., Pietrafesa E., Robasto D., Stabile S., Sorrentino E.) – ARACNE Editore

Journal Articles
(2021)
"An industry 4.0 approach to large scale production of satellite constellations. The case study of composite sandwich panel manufacturing" (Eugeni M., Quercia T., Bernabei M., Boschetto A., Costantino F., Lampani L., Marchetti Spaccamela A., Lombardo A., Mecella M., Querzoni L., Usinger R., Aliprandi M., Stancu A., Ivagnes M., Morabito G., Simoni A., Brandão A., Gaudenzi P.) – Acta Astronautica

"New and Emerging Hazards for Health and Safety Within Digitalized Manufacturing Systems" (Costantino F., Falegnami A., Fedele L., Bernabei M., Stabile S., Bentivenga R.) – Sustainability

(2022)
"Actions and Strategies for Coronavirus to Ensure Supply Chain Resilience: A Systemic Review" (Bernabei M., Colabianchi S., Costantino F.) – Sustainability

"Assessment of smart transformation in the manufacturing process of aerospace components through a datadriven approach" (Bernabei M., Eugeni M., Gaudenzi P., Costantino F.) – Global Journal of Flexible Systems Management

(2023)

"Resilience potentials for health and safety management in cobot applications using the Resilience Analysis Grid" (Adriaensen A., Bernabei M., Costantino F., Falegnami A., Patriarca R.) – ASME Journal of Manufacturing Science and Engineering

"Students' use of Large Language Models in engineering education: a case study on technology acceptance, perceptions, efficacy, and detection chances" (Bernabei M., Colabianchi S., Falegnami A., Costantino F.) – Computers & Education: Artificial Intelligence

"MARLIN Method: Enhancing Warehouse Resilience in Response to Disruptions" (Colabianchi S., Bernabei M., Costantino F., Romano E., Falegnami A.) – Logistics

(2024)

"Adaptive Automation: status of research and future challenges" (Bernabei M., Costantino F.) – Robotics and Computer-Integrated Manufacturing

"A meta-model driven approach to support smart transformation with Maturity Models" (Bernabei M., Costantino F., Tronci M.) – Journal of Industrial Integration and Management

(Under review)
"Investigating human situation awareness and performance in adaptive automation: an empirical examination in manufacturing" (Bernabei M., Costantino F.) – Applied Ergonomics

"Raw material size commonality decision tool: a bi-objective integer programming model" (Costantino F., Bernabei M., Colabianchi S., De Santis M., Patria D.) – Omega

"Assessing Smart Manufacturing by Combining IT Systems and Enabling Technologies in a Fuzzy Cognitive Maturity Model" (Andreou A., Bernabei M., Christoforou A., Colabianchi S., Costantino F., Leotta F., Mathew J. G., Mecella M., Monti F.) – International Journal of Computer Integrated Manufacturing

Conference Proceedings

(2021)
"Using Natural Language Processing to uncover main topics in defect recognition literature" (Bernabei M., Colabianchi S., Costantino F., Patriarca R.) – Proceeding of XXVI Summer School Francesco Turco – Industrial System Engineering

"Smart Manufacturing In The Space Industry. A Cyber-Physical System Architecture And Its Implementation To A Mait Process For Mega Constellations Of Satellites" (Gaudenzi P., Boschetto A., Costantino F., Eugeni M., Lampani L., Marchetti Spaccamela A., Mecella M., Quercia T., Querzoni L., Usinger R., Aliprandi M., Stancu A., Ivagnes M., Morabito G., Simoni A., Bernabei M., Lombardo A.) - Proceeding of the International Astronautical Congress - IAF Materials and Structures Symposium 2021 at the 72nd International Astronautical Congress, IAC 2021

"An Additive Manufacturing redesign of a military aircraft equipment within a logistic 4.0 framework" (Cardini V., Eugeni M., Boschetto A., Bottini L., Visone R., Pollice L., Coppotelli G., Stefano R., Zucca G., Izzo G., Bernabei M., Veniali F.) - Proceedings of the International Astronautical Congress, IAC 2021

(2022)
"Warehouse resilience framework for the Covid-19 disruption" (Bernabei M., Colabianchi S., Costantino F., Falegnami A.) – Proceeding of 22nd International Working Seminar on Production Economics

"Natural Language Processing applications in manufacturing: a systematic literature review" (Bernabei M., Colabianchi S., Costantino F.) – Proceeding of XXVII Summer School Francesco Turco – Industrial System Engineering

"Yet Another Warehouse KPI's Collection" (Falegnami A., Bernabei M., Colabianchi S., Tronci M.) – Proceeding of XXVII Summer School Francesco Turco – Industrial System Engineering

"Chatbot for training and assisting operators in inspecting containers in seaports" (Colabianchi S., Bernabei M., Costantino F.) – Proceeding of International Scientific Conference: The Science and Development of Transport, ZIRP 2022

(2023)
"Design framework for Dynamic Allocation System" (Bernabei M., Costantino F.) – Proceeding of the International Federation of Automatic Control, IFAC 2023

"Detecting dangerous behaviours and promoting safety in manufacturing using computer vision" (Colabianchi S., Bernabei M., Costantino F.) - Proceeding of the XXVIII AIDI Summer School – Francesco Turco

(2024)
"Advancing Occupational Safety and Health training: a Safety-II integration of the ADDIE model for virtual reality" (R. Bentivenga, M. Bernabei, M. Carli, S. Colabianchi, F. Costantino, A. Ferrarotti, M. Neri, E. Pietrafesa, E. Sorrentino, S. Stabile) - 14th International Conference on Methodologies and Intelligent Systems for Technology Enhanced Learning.

"Transforming training with new enabling technologies: a proposal to verify the efficacy of Virtual Reality tools in the Occupational Health and Safety sector" (R. Bentivenga, M. Bernabei, M. Carli, S. Colabianchi, F. Costantino, A, Ferrarotti, M. Neri, E. Pietrafesa, E. Sorrentino, S. Stabile) – Proceeding of the World Conference on Smart Trends in Systems, Security and Sustainability (WorldS4 2024)

(2024)

"Leveraging Performance-Shaping Factors for a human-centric adaptive automation algorithm" (Bernabei M.) - International Conference on Industry 4.0 and Smart Manufacturing (ISM 2024)

"Ergonomic training tool: a pose detection-based digitalization of ISO/TR 12295 and ISO 11228-1" (M. Bernabei, S. Colabianchi, N. Sabetta) - Proceeding of the XXIX AIDI Summer School – Francesco Turco

Posters (or short conference proceedings)

(2024)
"Trasformazione digitale: analisi dei rischi e strumenti di self assesment della resilienza organizzativa per la salute e sicurezza sul lavoro" (Stabile S., Sorrentino E., Pietrafesa E., Bentivenga R., Bernabei M., Costantino F.) - AIDII 2024 (Associazione Italiana Degli Igienisti Industriali)

(2018 – 2020)

o   Academic Achievements

Master's Degree DM 270/04 in Management Engineering [LM – Ordin. 2019] (class LM 31), Interfaculty between Civil and Industrial Engineering – Information Engineering, Computer Science and Statistics – specialization: Management of Logistics and Production Services – at the University of Rome "La Sapienza" with a 110 cum laude / 110 grade.

(2015 – 2018)
Bachelor's Degree in Management Engineering [L – 270 – Ordin. 2016] (class L – 8), Faculty of Information Engineering, Computer Science and Statistics at the University of Rome "La Sapienza" with a 104 / 110 grade.

(2010 – 2015)
Secondary school diploma from the Classical High School "Torquato Tasso" in Rome (RM).

NATIVE LANGUAGE	**ITALIAN**
MORE LANGUAGES	
	ENGLISH **– B2**
	FRENCH **– B1**
	SPANISH **– A2**
INTERPERSONAL SKILLS AND COMPETENCES	EXCELLENT VERBAL AND NON-VERBAL COMMUNICATION SKILLS AND A STRONG APTITUDE FOR TEAMWORK. EMPATHY AND SELF-CONTROL SKILLS, APTITUDE FOR DEALING WITH OTHERS AND UNDERSTANDING PEOPLE'S MOODS. APTITUDE FOR PROACTIVE LISTENING AND FOR BUILDING RELATIONSHIPS WITH PEOPLE OF DIFFERENT NATIONALITIES AND CULTURES. ABILITY TO ADAPT QUICKLY WITHIN DIFFERENT CONTEXTS AND GROUPS.
ORGANISATIONAL SKILLS AND COMPETENCES	HIGH DEGREE OF AUTONOMY IN WORK AND TIME ORGANISING. ABILITY TO PRIORITISE AND MANAGE DIFFERENT ACTIVITIES INDEPENDENTLY, MEETING DEADLINES AND OBJECTIVE ABILITY TO WORK IN STRESSFUL SITUATIONS AND MANAGE RELATIONSHIPS. PROACTIVE AND ENTERPRISING. ABILITY TO MANAGE AND WORK IN A TEAM, INCLUDING COORDINATING A LARGE NUMBER OF PEOPLE.
TECHNICAL SKILLS AND COMPETENCES	EXCELLENT COMMAND OF THE OFFICE PACKAGE (WORD, POWER POINT, EXCEL AND SIMILAR). MASTERY OF: MINITAB, POWER-BI AND OTHER DATA-VISUALISATION PROGRAMMES; PYTHON PROGRAMMING LANGUAGE; PROJECT MANAGEMENT TOOLS&TECHNIQUES; LEAN SIX-SIGMA METHODOLOGY.
DRIVING LICENCES OR OTHERS	B DRIVING LICENCE