

EUROPEAN CURRICULUM VITAE FORMAT



PERSONAL INFORMATION

Name **BERNABEI MARGHERITA**

Personal address

Business address

Telephone number

E-mail

Nationality

Birthday

EDUCATION AND WORK EXPERIENCES

- Dates (from – to) **(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/>
- (In progress)**
Research activities in "Study of a technology solution for predictive maintenance: definition and implementation of a predictive maintenance model involving critical elements of a rotary table used in the plate welding process in the XT1 relay production line" (University of Rome "La Sapienza" and ABB company).
Contribution to consulting project's activities in "Digitalization of Linköping Production Line - Technology Study" (University of Rome "La Sapienza" and Ruag Space).
Research activities on "Design and implementation of Chatbot to prevent health and safety risks in manufacturing contexts" (University of Rome "La Sapienza").
Contribution to the book "Robots and cobots in business and school. Formative and transformative processes" – edited by Franco Angeli, with the chapter "New models for occupational safety management with cobots" (University of Rome "La Sapienza")

Research activities on “Wholesaler resilience framework for the COVID-19 disruption” (University of Rome “La Sapienza”).

Cooperation in the Tradars project (digital transformation - analysis - risks - security) BRIC ID 50, planned and developed by the University of Rome "La Sapienza" (Margherita Bernabei, Francesco Costantino, Andrea Falegnami, Massimo Tronci), the University of Turin (Davide Della Rina, Daniela Roboasto), the LUMSA University (Marco Isceri, Fabio Macioce) and the National Institute for Insurance against Accidents at Work - INAIL (Rosina Bentivenga, Emma Pietrafesa, Edvige Sorrentino, Sara Stabile), granted by INAIL itself.

Reviewer for Computers and Industrial Engineering (CAIE) - International Journal.

Reviewer for Cogent Engineering (CE) - International Journal.

Reviewer for Global Journal of Flexible System Management (GJFSM)- International Journal.

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

Reviewer for XXXIII AilG Scientific Meeting (RSA AilG 2022)

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

Obtaining funding for Research Initiation Projects - Type 1 - Year 2022 for research titled "Adaptive Automation in smart and collaborative manufacturing contexts".

(May 2023)

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

(February – March 2023)

Charge at the Project “ORIENTAMENTO NEXT GENERATION – Università La Sapienza” founded by the “Piano Nazionale di Ripresa e Resilienza (PNRR)”.

(September 2022)

Participation in the International Conference - The Science and Development of Transport ZIRP 2022 – Sibenik, Croatia.

Participation in the XXVII Summer School “Francesco Turco” – Industrial Systems Engineering – Sanremo, Italy.

(July 2022)

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

(June 2022)

Participation in the IX PhD On the Go 2022 “Marco Garretti” – Benevento, Italy.

(April 2022)

Attendance at “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”.

(March 2022 – May 2022)

Supervisor for three theses of “2nd Level Master’s in Law, Organization And Management Of Security” (University of Rome La Sapienza – Faculty of Law).

(February 2022 – April 2022)

Participation and winning of the 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 – with AROMA project (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".

(February 2022)

Participation in the 22nd International Working Seminar on Production Economics, 2022 – Innsbruck, Austria.

(October 2021)

Participation in the 72nd International Astronautical Congress (Dubai) – "Smart manufacturing in the framework of space industry. An industry 4.0 approach to large scale production of satellite constellations" (M. Eugeni, T. Quercia, A. Boschetto, M. Bernabei, F. Costantino, L. Lampani, A. Lombardo, A. Marchetti Spaccamela, M. Mecella, L. Querzoni, R. Usinger, M. Aliprandi, A. Stancu, M. M. Ivagnes, G. Morabito, A. Simoni, A. Brandão, P. Gaudenzi).

(September 2021)

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

(July 2021)

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

(February 2021 – October 2021)

Research activities on "New and Emerging Hazards for Health and Safety Within Digitalized Manufacturing Systems" (Department of Mechanical and Aerospace Engineering of Sapienza University of Rome: Francesco Costantino, Andrea Falegnami, Lorenzo Fedele, Margherita Bernabei; National Institute for Insurance against Accidents at Work - INAIL: Sara Stabile, Rosina Bentivenga).

(February 2021 – December 2021)

Research activities on "Using Natural Language Processing (NLP) to review the literature" (University of Rome "La Sapienza").

Research activities on "Identification and taxonomy of case studies on 4.0 technologies in manufacturing" (University of Rome "La Sapienza").

Research activities on "A self-assessment Maturity Model to guide newcomers in a Smart manufacturing environment" (University of Rome "La Sapienza").

(February 2021 – November 2021)

Research activities in the Project "ESA Smart Manufacturing For Future Constellations" (RUAG, University of Rome "La Sapienza", ThalesAlenia Space), and contribution in the drafting of Technical Notes.

Participation in the ELISE call for proposals - European Network of AI Excellence Centres - with "RENATO" project (Reinforced hEalth aNd sAFeTy mOnitoring) – an OUT-OF-THE-BOX tool for monitoring health and safety operating conditions integrating Computer Vision and Reinforcement Learning mechanisms, proposed by Agic Innovation and the Department of Mechanical and Aerospace Engineering of the University of Rome "La Sapienza".

(February 2021 – August 2021)

Analysis and research for the representation of the State of the Art in the following project areas: image analysis to recognize subjects and enable verisimilitude checks, image analysis for monitoring artistic and cultural heritage, automatic reading of documents to reunite paper and digital in the authorization phases of the liability cycle, Business Intelligence applied to the AFC area, Whistleblowing, corporate E-Learning, software solutions for managing the Auditors' Register, GDPR, transparency in company relations and practices, B2B in affiliation, social listening.

Drafting of Web articles to promote the innovative solutions of Microsoft Custom Vision, Microsoft Form Recognizer, PowerApp integrated with a Microsoft BlobStorage.

(October 2020- February 2021)

Certificate of attendance at "The Road to Project Management" delivered by the Central Italy Chapter of the Project Management Institute (PMI) - (Philadelphia).

• Publications

(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., Sorrentino E., Stabile S.) – Monografia, Aracne editore.

"Design a Dynamic Automation System to Adaptively Allocate Functions between Humans and Machines" (Bernabei M., Costantino F.) – International Federation of Automatic Control (IFAC) World Congress 2023.

(2022)

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

"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.) – Research paper published in Acta Astronautica Journal.

"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.

"Actions and Strategies for Coronavirus to Ensure Supply Chain Resilience: A Systematic Review" (Bernabei M., Colabianchi S., Costantino F.) – Research paper published in Sustainability Journal.

"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.

"Nuovi strumenti per la gestione della salute e sicurezza sul loro con i Cobot" (Bernabei M., Costantino F., Falegnami A., Stabile S.) – book chapter in Robot e Cobot nell'Impresa e nella scuola. Processi formativi e trasformativi nella workplace innovation – Franco Angeli editore.

(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.

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

"Smart manufacturing in the space industry. A cyber-physical system architecture and its implementation to a mail 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.

"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.

Under review

(2023)

"Detecting dangerous behaviours and promoting safety in manufacturing using computer vision" (Colabianchi S., Bernabei M., Costantino F.) - XXVIII Summer School "Francesco Turco" – Blue, Resilient & Sustainable Supply Chain.

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

(2022)

"A meta-model driven approach to support digitization evolution with Maturity Models" (Bernabei M., Costantino F., Di Gravio G.) – Journal of Information System Management.

"A cyber-socio-technical system method for warehouse management in the face of perturbations. A case study on Covid-19" (Colabianchi S., Bernabei M., Costantino F., Romano E., Falegnami A.) – International Journal of Management Science and Engineering Management.

"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.) – International Journal of Human Computer Interaction.

- **Traning Activities**

(2022 – 2023)

Dalla ricerca all'innovazione: imprenditoria femminile o quando il futuro è rosa.

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.

Applying Digital Intelligent Assistant in Manufacturing.

Use cases and demonstrators of Digitalisation of manufacturing.

AI4EU Café: Embodied online dancing and partying with digital characters.

Cybersecurity issues associated with manufacturing.

Resilience Engineering per l'analisi degli Impianti Industriali – PHD-NET IN INDUSTRIAL SYSTEMS ENGINEERING – SCUOLA VIRTUALE DI DOTTORATO PROMOSSA DALL'ING-IND/17.

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

Research topics in Manufacturing and Service Operations Management (M&SOM) – University of Bergamo

(2018 – 2020)

• 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	<p>ENGLISH – B2</p> <p>FRENCH – B1</p> <p>SPANISH – A2</p>
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