CURRICULUM VITAE

per la destinazione "ai fini della pubblicazione" in ottemperanza al D. Lgs. 33/2013

XXX, PhD Student

xxx@xxx.it

Tel: xxx

xxx

xxx

xxx

WORK EXPERIENCE

11/2021 - Ongoing **Teaching assistant** at Sapienza University of Rome (Italy)

For "Operations Management" and "Industrial Plants" at Faculty of Civil and Industrial Engineering respectively MSc in Mechanical Engineering and BSc in Mechanical Engineering and for the BSc and MSc in Management Engineering; for "Quality Management" and "Industrial Plants" at Faculty of Civil and Industrial Engineering respectively MSc in Mechanical Engineering and MSc in Management Engineering

01/2022 – 04/2022 **Business Intelligence analyst** at aiComply s.r.l**.** (Italy)

Design and implementation of Business Intelligence report to create an interactive platform to support strategic decision making for a pharma enterprise.

07/2021 - 09/2021 **Research Assistant** at Sapienza University of Rome, Faculty of Civil and Industrial Engineering, Department of Mechanical and Aerospace Engineering

04/2021 – 09/2021 **Business Intelligence code developer** at aiComply s.r.l**.** (Italy)

Code developer in M programming language in Microsoft Power Query for a project of implementation of a platform to perform analysis on weather forecasting accuracy and support Air Navigation Service Providers.

03/2019 – 06/2019 **Business consultant** at Wuerth Phoenix s.r.l**.** (Italy)

ERP systems consultant for production environments with a focus on production control data management and visualization, and operations scheduling and planning.

EDUCATION AND TRAINING

11/2021 - Ongoing **PhD in Industrial and Management Engineering** at Sapienza University of Rome, Faculty of Civil and Industrial Engineering, Department of Mechanical and Aerospace Engineering

Main research interests and competences comprehend: cyber-socio technical systems modelling, risk analysis and risk management for complex industrial systems, complex systems theory and analysis, network theory and analysis, simulation techniques, machine learning and Business Analytics techniques.

2018 - 2020 **MSc in Mechanical Engineering – Industrial Production** (110/110) at Sapienza University of Rome (Italy)

Main acquired knowledge comprehend: risk management and safety design for industrial plants and processes, non-conventional production technologies (e.g., LASER and Additive Manufacturing), industrial operations management and Lean Thinking principles, project management techniques

2014 - 2017 **BSc in Mechanical Engineering** (92/110) at Sapienza University of Rome (Italy)

Main acquired knowledge comprehend: mechanical engineering fundamentals, mechanical design (2D and 3D CAD), coding (Python, C, MATLAB, VBA).

PERSONAL SKILLS

LANGUAGES

Italian (Mother's tongue)

English (Intermediate, Basic Professional Competence)

COMPUTER SKILLS

Microsoft Office Suite (Advanced)

MATLAB (Advanced)

Simulink (Advanced)

AutoCAD (Advanced)

Power BI (Intermediate)

Inventor (Intermediate)

SolidWorks (Intermediate)

Python and C programming (Intermediate)

DRIVING LICENCE

B

ADDITIONAL INFORMATION

PROJECTS

05/2022 – Ongoing **Hydrogen incidents and accidents analysis collected in HIAD 2.0 database supporting by Business Intelligence tools**

Design and implementation of a Business Intelligence report to extract and display information on historical hydrogen accidents and incidents

03/2022 – Ongoing **Industrial accidents analysis reported in ARIA database supporting by Business Analytics and Machine Learning algorithm**

Design and implementation of a Business Intelligence model to extract knowledge of circumstances, outcomes and accident causes of accidents occurred in France or abroad. Nevertheless, apply Machine Learning algorithm to data completion to predict response protocols and future measures to avoid repeat accidents and minimize them consequences.

01/2022 – 04/2022 **Business Intelligence and Business Analytics for product and organization management** in collaboration with aiComply s.r.l.

Design and implementation of Business Intelligence interactive dashboards to support decision making by the top management of a pharmaceutical company.

01/2022 - 03/2022 **Business Analytics on cyber attack data collected from an experimental testbed of a water treatment plant**

Application of Business Analytics tools to perform analysis and calculate critical performance indicators for a water treatment plant subjected to cyber attacks. The analyzed data were collected at Singapore University of Technology and Design from a physical experimental testbed of a water treatment plant.

05/2021 - 11/2021 **Compulsory safety reporting analysis collected in eMARS database supporting by Business Intelligence and Analytics tools**

Design and implementation of a Business Intelligence report to extract and display information on compulsory safety reporting collected by the European Commission. The report has been built to create a scalable and maintainable data model for obtaining useful information on safety reporting systems to manage data on industrial hazardous events.

09/2021 - 10/2021 **Business Intelligence reporting and dashboards design for 15th Conference on Naturalistic Decision Making and 9th Symposium on Resilience Engineering** in collaboration with Resilience Engineering Association (REA)

Design and development of Business Intelligence dashboards and reports to explore and to disseminate data from the 15th Conference on Naturalistic Decision Making and 9th Symposium on Resilience Engineering organized by REA. The report is freely available at: https://www.resilience-engineering-association.org/symposium/

04/2021 - 09/2021 **Key Performance Indicator analysis and Business Intelligence reporting on aerodrome weather forecasting data** in collaboration with aiComply s.r.l.

Design and implementation of a platform to perform analysis on weather forecasting accuracy and support Air Navigation Service Providers in guaranteeing correct and safe aerodrome management. Design and implementation of advanced Business Intelligence interactive dashboards to extract knowledge from historical weather data applying ETL to properly parse information inside report strings.

PUBLICATIONS

Journal (1)*

1. Xxx (2022), *Modelling cyber resilience in a water treatment and distribution system*, Reliability Engineering and System Safety.

*Additionally, the following manuscripts are currently under review:

2. Xxx (2022)**,** *Supporting aerodrome weather forecasting through anomaly detection and hierarchical clustering*, Expert Systems with Applications. (Under review)
3. Xxx (2022)**,** *Thinking in systems, sifting through simulations: a way ahead for cyber resilience assessment*, Process Safety and Environmental Protection. (Under review)

International conference proceedings (4)*

1. Xxx (2022). *Investigating inventory data to support warehouse management through Machine Learning*, Proceedings of XXVII Summer School "Francesco Turco": "Unconventional Plants: Technologies, tools and Methodologies for emerging domains", 7-9 September 2022, Riviera dei Fiori (Italy). (In press)

2. Xxx (2022). *A simulation-driven cyber resilience assessment for water treatment plants*, Proceedings of 30th European Safety and Reliability Conference (ESREL 2022). To be held: 28 August - 1 September 2022, Dublin (Ireland). (In press)

3. Xxx (2021). *A Model-Based Assessment of Cyber-Resilience Evaluation for Water Purification Plants with Societal Impact*, Abstract for Poster Competition at 4th European Conference on Industrial Engineering and Operations Management (IEOM 2021). 2-5 August 2021, Rome (Italy) online.

4. Xxx (2021). *An Integrated Simulation Model for Water Purification and Distribution*. Abstract for Simulation Competition at 4th European Conference on Industrial Engineering and Operations Management (IEOM 2021). 2-5 August 2021, Rome (Italy) online.

*Additionally, the following manuscripts are currently under review:

5. Xxx (2022). *Performance-based analysis of aerodrome weather forecasts*, Proceedings of New Trends in Civil Aviation 2022, 26-27 October 2022, CIIRC CTU in Prague (Czech Republic). (Under review)

HONOURS AND AWARDS

2021	**Winner of ESRA (European Safety and Reliability Association) scholarship** for the continuing education course on "Advanced Quantitative Risk and Resilience Assessment" organized by the Department of Energy – Politecnico di Milano. (12 October - 18 November 2021).
2021	**IEOM Outstanding Student Leadership Award**. Awarded by the Industrial Engineering and Operations Management Society during the 4th IEOM European Conference, 2-5 August 2021 – Rome (Italy).
2021	**IEOM Poster Competition Award (2nd place)**. Awarded by the Industrial Engineering and Operations Management Society during the 4th IEOM European Conference, 2-5 August 2021 – Rome (Italy).
2021	**IEOM Simulation Competition Award (2nd place)**. Awarded by the Industrial Engineering and Operations Management Society during the 4th IEOM European Conference, 2-5 August 2021 – Rome (Italy).

REVIEWER

2022	IEOM – 5th European Conference on Industrial Engineering & Operations Management**.**

Rome, 1 July 2022

Firma