



● WORK EXPERIENCE

01/03/2023 – 01/03/2024 Roma, Italy

JUNIOR IT CONSULTANT JUNIOR ENTERPRISE OF SAPIENZA UNIVERSITY OF ROME (JESAP CONSULTING)

Created productivity-focused digital solutions for the **Junior Enterprise** and external clients, including applications for **inventory and sales management** and mathematical models for **personnel scheduling**. The personnel management software I developed was awarded **Best Project** by JE Italy.

● EDUCATION AND TRAINING

01/11/2023 – CURRENT Roma, Italy

ABRO PH.D. PROGRAM IN OPERATIONS RESEARCH La Sapienza Università di Roma

- Research on continuous optimization and machine learning, particularly emphasizing **derivative-free** methods.

- Among the **projects** carried out:

- Optimizing electric accumulator sizing to support railway transportation.

- Applied advanced feature selection methods to analyze an imbalanced dataset, identifying key predictors of gastric neoplastic lesions.

- Participated and won the **Synthetic Data Hackathon 2024** organized by Aindo. Contributed to developing AI models for innovative smart home applications using synthetic datasets.

- Conducted teaching activities in **Linear Algebra, Analysis, and Optimization Methods for Machine Learning** for bachelor's and master's engineering students.

- Successfully completed the "**CO@WORK 2024**" doctoral school, passing the final examination.

Website <https://www.uniroma1.it/it/pagina-strutturale/home>

Links <https://co-at-work.zib.de/> | <https://www.aindo.com/news/hackaton/>

25/09/2021 – 21/07/2023 Roma, Italy

MASTER OF SCIENCE IN DECISION-MAKING MODELS FOR MANAGEMENT ENGINEERING La Sapienza Università di Roma

- Equipped with the necessary theoretical, modeling and methodological skills for the **formulation and solution of decision-making problems** in complex systems.

- Among the **projects** carried out: implemented Truncated Newton for **unconstrained optimization**, Penalty and Augmented Lagrangian method for **constrained optimization**, and developed an FNN for function approximation and an SVM for script recognition in **machine learning**.

- Attended the Sapienza **Honours Programme**: selected as one of the top 15 students in the course enabled attendance at seminars led by distinguished professors and experienced managers from prominent enterprises, offering valuable insights into contemporary topics.

- **Thesis Project**: "Formulation of an ML-based Model for the Assessment of Maximum Sprint Capability in Elite Soccer Players"

Website <https://www.uniroma1.it/it/pagina-strutturale/home> | **Final grade** 110 Cum laude

•Comprehensive education integrating physical-mathematical principles with information sector disciplines, emphasizing economic analysis, organizational comprehension, and rigorous mathematical **problem-solving**.

Website <https://www.uniroma1.it/it/pagina-strutturale/home> | **Final grade** 110 Cum laude

Roma, Italy
CEFR LEVEL B2 Cambridge Institute

Website <https://www.cambridgeenglish.org/exams-and-tests/first/>

● **LANGUAGE SKILLS**

Mother tongue(s): **ITALIAN**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	C1	C1	B2	C1	B2

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user

● **DIGITAL SKILLS**

Social Network | Conoscenza avanzata di Python e delle principali librerie (NumPy, Pandas, scikit-learn, Matplotlib) | Padronanza del Pacchetto Office (Word Excel PowerPoint ecc) | Windows

● **CONFERENCES & SEMINARS**

14/02/2024 – 16/02/2024 Università della Calabria, Rende, Italia
AIROYoung Workshop

Presented my master’s thesis work, *Formulation of an ML-based Model for the Assessment of Maximum Sprint Capability in Elite Soccer Players*

Link <https://www.unical.it/ayw2024/>

24/06/2024 – 28/06/2024 Lund University, Lund, Svezia
EUROPT 2024

Presented my master’s thesis work, *Formulation of an ML-based Model for the Assessment of Maximum Sprint Capability in Elite Soccer Players*

Link <https://europt2024.event.lu.se/>