



Federico Signorile

Date of birth: 08/07/2000 | **Nationality:** Italian | **Email address:** signorilefederico@libero.it

● EDUCATION AND TRAINING

01/11/2024 – CURRENT

PHD CANDIDATE IN AUTONOMOUS SYSTEM Politecnico di Bari

Website <http://dasy.poliba.it/phd/dasy/>

09/2022 – 21/10/2024

MASTER DEGREE - MANAGEMENT ENGINEERING, CURRICULUM OPERATIONS MANAGEMENT Politecnico di Bari

Final grade 110/110 cum laude | **Thesis** Design of a multi-hub battery charging system to electrify rural areas in the global south

01/04/2024 – 30/06/2024 Borlänge, Sweden

VISITING STUDENT Dalarna University

Department of Information and Data Management
Department of Engineering

08/2019 – 25/10/2022 Bari, Italy

BACHELOR'S DEGREE - MANAGEMENT ENGINEERING Politecnico di Bari

Address Via Edoardo Orabona,4, 70126, Bari, Italy | **Final grade** 110/110 cum laude |

Thesis "Improving warehouse logistics flows at Socoges S.r.l." (Industrial Plants)

20/12/2022

REFRESHER COURSE FOR EXTRAORDINARY INSTALLER AND MAINTAINER OF ENERGY SYSTEMS POWERED BY RENEWABLE SOURCES - ELECTRICAL TYPE Agatos

28/07/2021 MILANO

CERTIFIED PROJECT MANAGEMENT ASSOCIATE – IPMA LEVEL D IPMA ITALY

Address Via Chiaravalle 8, 20122, MILANO

19/11/2020

INTRODUCTORY CERTIFICATE IN PROJECT MANAGER IPMA ITALY

2013 – 2019 conversano, Italy

HIGH SCHOOL SCIENTIFIC DIPLOMA Liceo scientifico sante simone

Address via luigi gallo,19, 70014, conversano, Italy | **Final grade** 100/100

● WORK EXPERIENCE

02/2022 – 06/2022 Monopoli, Italy

LOGISTICS ENGINEER SOCOGES S.R.L.

Internship experience on the basis of which the Bachelor's Thesis work titled "Improving warehouse logistics flows at Socoges S.r.l." was carried out. The internship activities focused on the execution of two projects:

1. Implementation of a Warehouse Management System (WMS) to integrate with the company's ERP, aiming to enhance the management of informational flow and optimize logistic operations.
2. Feasibility study of a goods lift platform to improve material logistics flows (various simulations, analysis of changes of time and operating costs, and evaluation of more qualitative effects of the solution).

DIGITAL SKILLS

Disegno 2D in Autocad | Network Analysis | MATLAB | SIMULINK | Python | EXCEL | SQL | Data Mining: Rstudio | Nicepage | AlgoBuild | Markup languages: LaTeX, Html | Backend developing: PHP, PHP OOP (postgresql, mysql) | Frontend developing: HTML, CSS

PROJECTS

01/2024 - 10/2024

Development of a Battery Charging System to Electrify Rural Areas in the Global South

Academic research conducted in collaboration between Politecnico di Bari and Dalarna University. Developed a mathematical model to facilitate the replication of an electrification system with decoupling between energy supply and demand in various communities in the Global South. Methodologies employed in the project: Data analysis, data mining, time-series analysis, discretization model linearization, optimization and multi-objective optimization, statistical testing, linear and nonlinear programming, numerical simulations.

Analysis of the multi-agent pathfinding problem as a discrete-time nonlinear dynamic system.

A resolution approach to manage traffic, plan routes, and coordinate movements of a fleet of autonomous vehicles operating within a shared warehouse environment. This approach adopts a decentralized, non-cooperative sequential priority-based model in a discretized environment, incorporating a variant of the Dijkstra algorithm within an expanded-time graph.

Development of a Warehouse Management System (WMS)

Design and engineering of the back end and front end of a simple Warehouse Management System (WMS) for managing warehouse references and auxiliary activities, including automatic calculation of a turnover index to optimize storage

07/2023 - 10/2023

AGR&EN

Design and presentation of an engineering or research project for the RAI "YLAB PRIX ITALIA" contest. The project aims to optimize the trade-off between agricultural and energy production by exploiting automation tools and methodologies, in particular the implementation of a dynamic double tilt system for PV panels.

LANGUAGE SKILLS

Mother tongue(s): **ITALIAN**

Other language(s):

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

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

CONFERENCES AND SEMINARS

28/08/2024 - 01/09/2024 Bari - Italy

IEEE CASE 2024

Staff - Student Volunteer

29/05/2024 Dalarna University - Borlänge - Swden

Research Seminar : "Design of a battery charging system to electrify rural areas in the global south"

Main presenter

Seminar Series - Information and Engineering