

MSc student in Computer Science Engineering at Politecnico di Milano, with a strong passion for ICT, innovation projects and software development, both from the technical and business-oriented perspective. I excel in team-based environments and problem-solving scenarios.

Education

Politecnico di Milano

February 2023 – July 2025

MSc in Computer Science and Engineering – ICT Engineering, Business & Innovation

- Expected grade: 107/110
- Relevant modules:
 - Software Engineering 2, Data Bases 2, Advanced Computer Architecture
 - Recommender Systems, Design and Implementation of Mobile Application
 - Accounting, Finance, Strategy

Key projects

- **Design and Implementation of a satellite recommender system for critical event detection**
 - Development of a system for detecting critical events (e.g., earthquakes, floods) and automatically retrieving relevant satellite imagery, including event confirmation with AI and area definition.
- **Design and Implementation of “Olivevo”**
 - Flutter-based application for olive oil purchase with integrated e-commerce platform and mobile/website support, utilizing external APIs (WooCommerce, PayPal).
- **Design and Implementation of “NewsTalk”**
 - Flutter-based news application with integrated social network, presenting content based on user location and preferences, utilizing external APIs (Google Maps, Algolia).
- **Design of “eMall – e-Mobility for All”**
 - Design of an operating system for reserving electric vehicle charging stations.

Berliner Hochschule für Technik (BHT)

October 2023 – July 2024

Exchange Program in Data Science & Medieninformatik

- Relevant modules:
 - Computer Science for Big Data, IT-Security, Innovation in Technology and Business

Key projects

- **Interactive tour of robot use cases**
 - H5P-based 360° interactive tour to show and demonstrate the possibility of supporting and enhancing educational activities through the presence of a humanoid robot.

Politecnico di Milano

September 2019 – February 2023

Bachelor's Degree in Ingegneria Informatica

- Title: Laurea di primo livello in ingegneria informatica (L-8)
- Grade: 94/110
- Relevant modules:
 - Mathematics, Physics and Logic
 - Algorithms and Data Structures
 - Software Engineering

Key projects

- **Implementation of “Eryantis”**
 - Java-based implementation of a strategic board game for the bachelor's thesis, including GUI, CLI, network functionalities, multiplayer online feature and game-saving capabilities.
- **Implementation of “WordChecker”**
 - C-based project on algorithms and data structures for the bachelor's thesis, focusing on optimizing time and memory complexity using red-black binary trees and efficient search algorithms

Liceo Scientifico “A. Einstein” Teramo

2014 – 2019

Diploma di Liceo Scientifico Tradizionale

- Grade: 100/100

Professional Experience

Leonardo S.p.A. – Leonardo Labs

October 2024 – April 2025

Selected for the Leonardo Deep Dive program, I am currently undertaking an internship focused on Big Data Analytics methodologies and tools, applied to industrial problems and scenarios, particularly within the Space domain. This opportunity allows me to apply theoretical knowledge to real-world challenges in a forward-thinking industry, contributing to my master's thesis.

Skills & Interests

Languages

Italian (Native), English (Proficient), Spanish (Proficient), German (Basic)

Programming skills

Python, Java, C, Dart, MySQL, JavaScript

Frameworks and other tools

Torch, Pandas, NumPy, Scikit-learn, Docker, Flutter, Figma, Office package

Soft skills

Problem solving, team working, leadership, flexibility, curiosity and creativity

Personal interests

I follow an active lifestyle: I am passionate about various sports, practised at an amateur level, and have a variety of interests, from music to contemporary history. I consider socialising as an important factor in overcoming difficult situations and creating added value.

Portfolio

For an overview of my technical projects and contributions, visit my GitHub profile:

<https://github.com/umbertocolangelo>