

MIRKO RIZZI

Working Placement

+39 3245855993 • mirko.rizzi@mail.polimi.it • LinkedIn • Milan, Italy • 19/02/2001



Summary

Aspiring space engineer with a strong background in propulsion systems. Skilled in problem-solving, great at teamwork, and adaptability, with passion, curiosity and determination in every new challenge. Academic experience includes specialized courses and hands-on projects, which formed me to a dynamic and solution-oriented mindset.

Experience

Master Thesis at Novaeka

Padova, Italy | Sep. 2025– March 2026

- SpaceX Merlin Engine Redesign: feasibility assessment of a LOX/LCH4 fuel-rich staged-combustion cycle, comprehensive engine development including ignition transient and chilling analyses, and final testbench implementation in EcosimPro to enable a complete virtual testing facility.

Minidart Com Startup (Side business of FAST Aerospace)

Milan, Italy | Sep. 2024 – Jan. 2025

- Researching and developing new innovations in the drone field.

Stewart for Monza F1 Grand Prix & VIP Events

Milan, Italy | Sep. 2022 – Dec. 2023

- VIP hospitality and customer service to international guests.

Internship at Canadian Aviation Museum & GLFC Airport

Windsor, Canada | Summer 2018

- Handled operations for aircraft at the GLFC & assisted in the restoration of WWII aircraft at the museum.

Education

MSc in Space Engineering

Politecnico di Milano | 2024 – 2026

Graduation in March >102/110

Enabled a deeper development of expertise and technical knowledge, particularly in the field of propulsion systems, through the specific academic track followed and projects.

BSc in Aerospace Engineering

Politecnico di Milano | 2020 – 2024

Graduated with 98/110 (3.6 GPA)

Provided me with a strong theoretical background and the ability to apply theory to conceptual design projects.

High School Diploma – Aerial Vehicle Construction

G. Feltrinelli Technical Institute | 2015 – 2020

Graduated with 100 cum laude (4.0 GPA)

Enabled me to apply theory to hands-on work in the construction lab, strengthening my practical skills.

Training / Courses / Certification

IELTS Certification – Overall score: 6.5 (2019)

ECDL Full Standard Certification (2018)

IPMA Certificate in Project Management (2024)

APR Pilot License (Non-Critical Operations)

Languages

Italian – Native

English – All Cambridge certifications up to C1 level (PET/KET/FCE/IELTS)

Main Projects

Steady-State Redesign of SpaceX Falcon 9 Second Stage Merlin Engine 1DV+

Design of a LOX-RP1 blow-down propulsion system for in-space low thrust application

Conceptual design and performance analysis of an airborne-launched rocket system

Soft and Technical Skills

- Problem-solving & creative thinking
- Proactive & results-driven approach
- Strong communication & adaptability
- Leadership & teamwork

- CAD: Inventor, SolidWorks, Solid Edge
- Coding: Matlab & Simulink
- EcosimPro, NASA CEA, RPA, OpenRocket
- CFD: Ansys Fluent

Passions

Propulsion has been the core area of study, driven by interest in improving performance while reducing costs and impact in an evolving environment. This is supported by academic and group project experience. Over 10y as soccer captain have strengthened teamwork and adaptability, with sport being a key passion and effective way to mentally recharge.