# TOMMASO CORRADINI

Aerospace Engineer | Aerodynamics | CFD
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## EDUCATION

**MSc Aerospace Dynamics** *2025 – 2026*
*Cranfield University, United Kingdom*

**Master in Space Entrepreneurship** *2025 – 2026*
*European Institute of Innovation for Sustainability*

**BEng Aerospace Engineering** *2019 – 2024*
*University of Padua, Italy*

## CORE COMPETENCIES

**Aerodynamics:** lift and drag generation, high-lift aerodynamics, stall and low-speed performance, take-off and landing flight phases, aircraft performance and handling qualities

**Aerodynamic icing:** ice accretion effects on aircraft performance and safety, iced high-lift configurations, CS-25 and FAR Part 25 icing certification requirements

**CFD:** ANSYS FLUENT, RANS modelling of 3D aircraft geometries, meshing, convergence assessment, post-processing and interpretation of aerodynamic coefficients

**Tools and analysis:** MATLAB for data analysis, CAD modelling, technical reporting, MS Office

**Languages:** Italian (native), English (C1, IELTS 7.0)

**Professional:** technical communication, teamwork in international environments, project management, problem solving

## RESEARCH EXPERIENCE

**MSc Thesis: CFD Analysis of Icing Effects on the NASA CRM High-Lift Configuration** *2025 – 2026*
*Cranfield University, UK | Supported by Airbus, ETW, Boeing and NASA*

Analysed the aerodynamic impact of ice accretion on civil airliner performance at full-scale Reynolds numbers, in response to evolving CS-25 and FAR Part 25 airworthiness regulations. Performed ANSYS FLUENT RANS simulations on the NASA Common Research Model (CRM) high-lift configuration with representative ice shapes, for low-speed take-off and landing conditions. Evaluated the resulting lift and pitching-moment degradation and assessed the capability of modern RANS-based CFD to capture icing-induced aerodynamic penalties. Conducted as a two-student research project, reporting results to academic and industrial stakeholders.

## ADDITIONAL PROJECT

**ORI – Orbital Risk Intelligence** *2025 – 2026*
*Space Entrepreneurship Project, European Institute of Innovation for Sustainability*

Co-developed a real-time collision risk platform for low Earth orbit satellite operators and insurers. Built a data pipeline converting orbital tracking data into risk scores and hazard classifications, and presented the product, financial model and roadmap to an expert panel.

## WORK EXPERIENCE

**Ice Cream Maker – Amorino** *May – Sep 2025*
Prepared artisan products to strict quality standards in a high-footfall environment during peak summer service.

**Surveillance Officer – Fondazione Arena di Verona** *Summers, Jun – Sep 2021 – 2024*
Ensured the safety and smooth operation of large-scale public events at the Arena di Verona. Managed crowd flow and controlled access points, following strict safety procedures and coordinating in real time with the team to maintain a secure environment.

**Mechanical Technician Intern – Uteco Converting S.p.A., Verona** *Summers, May – Jul 2016 – 2017*
Carried out assembly and maintenance of industrial machine components, working with the production team to troubleshoot mechanical issues and ensure correct installation and operation.