LUDOVICO CAMPANELLI

Curriculum Vitae

in *Linkedin*

Basic information

○ **Place of Birth:**   Teramo, Italy

○ **Date of Birth:**   July 13, 1998

○ **Nationality:**   Italian

○ **Address:**   Department of Sciences and Methods for Engineering, University of Modena and Reggio Emilia. Via Amendola 2, Reggio Emilia, Italy

○ **E-mail:**   ludovico.campanelli@unimore.it

○ **Mobile:**   +39 3887857968

Education

Jan 2023-now   **Ph.D. in Industrial Innovation Engineering**, *University of Modena and Reggio Emilia.*

2020–2022 :   **Master's degree in Mechanical Engineering**, *110/110 cum laudae*, University of Modena and Reggio Emilia.
Thesis:"Simulazione del trasporto di agenti patogeni in ambienti ventilati".

2017–2020 :   **Bachelor's degree in Mechanical Engineering**, *98/110*, University of Modena and Reggio Emilia.
Thesis: "Soluzioni asintotiche nella lubrificazione idrodinamica".

2012–2017 :   **Scientific Lyceum license**, *86/100*, Scientific Lyceum with aeronautical expansion, "G. d'Annunzio".

Technical skills

○ **Mesh generation:**   SnappyHexMesh, Gmsh, Ansys Fluent Mesher, Pointwise

○ **Computational Fluid Dynamics:**   OpenFOAM, ANSYS Fluent

○ **CAD:**   Solidworks, Ansys Geometry, FreeCAD

○ **Programming language:**   Python, MATLAB, Maxima

○ **Productivity:**   Microsoft Office, LaTeX

Language skills

First language: Italian

Self-assessment based on the Common European Framework of Reference (CEF):
- A1/A2: Basic user
- B1/B2: Independent user
- C1/C2: Proficient user

	Listening	Reading	Writing	Speaking
English	B2	B2	B2	B2

Research interests

- Development of models to predict droplets transport in indoor environments:

    - Development of a multiscale approach, consisting in a coupled 3D CFD model with 1D self-made model, to analyse respiratory droplets transport

    - Development of a 3D CFD model, with Eulerian-Lagrangian approach, to simulate respiratory droplets transport in ventilated indoor environments

- Development of general purpose model, based on Finite Volume Method, with a network composed of nodes and branches

- CFD models for thermal management of high-efficiency power trains for sustainable mobility.