



Francesca Rossetti

WORK EXPERIENCE

[01/03/2022 – 31/05/2022] **Aerodynamics Course Teaching Assistant**

Department of Mechanical and Aerospace Engineering, Sapienza University of Rome

Main activities and responsibilities:

University teaching assistant of the course "Aerodynamics" of the Bachelor's Degree in Aerospace Engineering.

[10/2021 – 07/2022] **CFD Applied Research - Consulting Activity**

Department of Mechanical and Aerospace Engineering, Sapienza University of Rome

Main activities and responsibilities:

Consulting support activities for Avio S.p.A.: CFD Sloshing Analyses of VEGA-E Cryogenic Propellant Tanks.

These activities have been carried out with Pointwise meshing tool and Ansys Fluent solver.

EDUCATION AND TRAINING

[01/11/2020 – Current] **Ph.D. in Aeronautics and Space Engineering (XXXVI cycle)**

Department of Mechanical and Aerospace Engineering, Sapienza University of Rome

Main subject / occupational skills covered:

Study of the behavior of cryogenic propellants in space tanks through computational fluid dynamics (CFD) simulations. Two years of experience with Ansys Fluent solver and Pointwise meshing tool.

[09/2016 – 10/2020] **Master's degree in Space and Astronautical Engineering**

Sapienza University of Rome

Final grade: 110/110

Thesis: "Parametric study of the heat transfer enhancement in LRE combustion chambers by longitudinal wall ribs".

[09/2013 – 12/2016] **Bachelor's degree in Aerospace Engineering**

Sapienza University of Rome

Final grade: 110/110

Thesis: "Manovre di rendez-vous su una sonda interplanetaria".

[09/2008 – 06/2013] **High School Diploma**

Liceo Scientifico Guglielmo Marconi

Address: 00034, Colleferro (RM)

Final grade: 100/100

LANGUAGE SKILLS

Mother tongue(s): Italian

Other language(s):

English

LISTENING B2 READING B2 WRITING B2

SPOKEN PRODUCTION B2 SPOKEN INTERACTION B2

French

LISTENING B2 READING B2 WRITING B2

SPOKEN PRODUCTION B2 SPOKEN INTERACTION B2

DIGITAL SKILLS

My Digital Skills

Microsoft Office | LaTeX | Matlab | Windows | Chemical Equilibrium Applications (CEA)
NASA Software | European Computer Driving Licence – ECDL

CFD Simulations

Ansys Fluent

Meshing Tools

POINTWISE | ANSA

Postprocessing

Tecplot 360

PUBLICATIONS

[2022]

Stella, F., Cimini, M., Düндar, B., Rossetti, F., Barbagallo, D., Neri, A., & Bernardini, M. "Numerical Analysis of the Free-Fall Behavior of a Space Launcher Fragment." Journal of Spacecraft and Rockets (2022), p. 1-13.

<https://doi.org/10.2514/1.A35421>

HONOURS AND AWARDS

[15/10/2013] **Certificate of honor: "Alfiere del Lavoro"** Awarding institution: President of the Italian Republic Giorgio Napolitano

CERTIFICATIONS

[17/05/2022 – 21/06/2022] **Basic introduction to ANSA and META for CFD Certificate**

[02/06/2021] **Tecplot 360 Basics Certification**

[23/10/2020]

Pegasus Certificate - The European Network of excellence in Aerospace Engineering Education

[28/05/2013] **First Certificate in English- Council of Europe Level B2**

[24/08/2012] **Diplôme d'études en langue française (DELF) B2**

[31/01/2011] **Certificato European Computer Driving Licence (ECDL)**