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# **Research Engineer**

# Aircraft simulations using Computational Fluid Dynamics and immersed boundary methods

# Job description

Together with Airbus Spain, we are looking for a highly skilled engineer to perform aircraft simulations (high lift configurations, full aircraft in cruise, etc.) using Computational Fluid Dynamics and immersed boundary methods to develop *new Hybrid-Electric aircraft concepts* within the European project HERA <a href="https://cordis.europa.eu/project/id/101102007">https://cordis.europa.eu/project/id/101102007</a>.

The position requires good knowledge of aeronautics, aerodynamics, computational fluid dynamics, high performance computing and pre/post processing techniques for CFD. Programming experience with C++ and Python is advantageous. The successful candidate will have good communication and analytical skills, and should be able to work independently and also collaborating with a team.

We are looking for a highly motivated and dynamic researcher to join Prof. Ferrer's team (<a href="https://sites.google.com/site/eferrerdg/">https://sites.google.com/site/eferrerdg/</a>) at the school of aeronautics ETSIAE-UPM in Madrid, Spain.

#### Required qualifications

Mandatory technical skills and experience:

- Background: European citizenship is required.
- Technical Background: Aeronautical Engineering.
- Required knowledge: Computational Fluid Dynamics, Paraview, mesh generators.
- Skills: Excellent computational skills: Python and C++.
- Additional knowledge: immersed boundary methods, high order discontinuous Galerkin.

# Language skills:

- Fluent in English.
- Spanish is not required but advantageous

#### What do we offer?

A competitive salary for 2 years (may be extended). We also offer to work in a stimulating, young and multicultural environment, and to be part of a dynamic and growing research team.

### How to apply?

Please send your CV, marks and references, to <a href="mailto:esteban.ferrer@upm.es">esteban.ferrer@upm.es</a> quoting the reference CFD\_UPM\_Airbus\_2023 before 25<sup>th</sup> of July.