Cenaero

Ref.: BE-JO-2023-05
Date : March2023

JOB OFFER

Senior Research Engineer
Aerodynamic and aerothermal simulations

Cenaero, located in Gosselies (Belgium), is a private non-profit applied research center providing to companies involved in a technology innovation process numerical simulation methods and tools to invent and design more competitive products. Our ambition is to be internationally recognized as a technology leader in modeling and numerical simulation, to be a strategic partner of large global industries as well as a real support to regional companies including innovative SMEs.

Cenaero provides expertise and engineering services in multidisciplinary simulation, design, and optimization in the fields of both mechanics (including fluid, structure, thermal, and acoustics) and electro-magnetics, manufacturing of metallic and composite structures as well as in analysis of in-service behavior of complex systems and life prediction. It also provides software through its massively parallel multi-physics platform Argo, its manufacturing process simulation and crack propagation platform Morfeo and its design space exploration and optimization platform Minamo. Cenaero operates the Tier-1 Walloon supercomputing infrastructure, named Lucia, of a capacity close to 4 Pflops on a mixed CPU and GPU architecture.

To support the expanding **research activities focusing on aerodynamic and aerothermal CFD applications**, we are looking for a senior research engineer and offer a permanent contract (CDI) within our team in Belgium.

Job description

We are working on a daily basis on challenging projects with our clients and research partners. These projects are often integrated in a multi/pluridisciplinary context that relies on a strong CFD-centric expertise, involving aerodynamic, aeroacoustic, aeroelastic, aeromechanical and/or aerothermal analyses. Passion drives us; boldness moves us forward to ambitious projects. Scientific rigor and intellectual curiosity fuel our quest for high-quality work.

Your aerodynamic expertise and skills will allow you to set up and further develop CFD simulation strategies that require complex meshing and/or efficient coupling methods. You will be responsible for the technical progress as well as for the project management, in order to meet our clients' expectations and in line with our Quality Management System (EN9100).

Profile

We are looking for a candidate with:

- an engineering master degree (or equivalent), with a PhD degree as a valuable asset
- a solid background in numerical methods for Computational Fluid Dynamics
- a good knowledge of multiphase flows, heat transfer modeling, multi-species transport, turbulence
- a working experience (industrial or academic) of at least 4 years on CFD-centric projects
- a proficiency in different CFD software (Ansys-Fluent, OpenFOAM,…) and pre/post processing tools
- scripting and programming experience (C++, Python, bash,…)
- excellent analytical skills and solution-oriented thinking capabilities
- autonomous working skills with an aptitude for team work
- a fluency in French and English
- OpenFOAM development experience as a welcomed skill

Offer

By joining Cenaero, you'll have the opportunity to take part in the challenging developments of different sectors, in direct contact with its economic actors and experts. Cenaero offers you a competitive salary and the opportunity to develop yourself in a dynamic and stimulating environment. We believe our co-workers are the source of our success. We care for the personal development of our collaborators and seek to make them harmoniously progress.

Cenaero • Bâtiment Eole • Rue des Frères Wright 29 • B-6041 Gosselies • Belgique
Tél. +32 (0)71 910 930 • Fax +32 (0)71 910 931 • info@cenaero.be • www.cenaero.be

Contact

Interested candidates should send a cover letter, quoting the reference number of the offer (BE-JO-2023-05) and a resume to rh_be-jo-2023-05@cenaero.be.