JOB OFFER

Software Development Engineer in Optimization and Reduced-Order Modeling

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. Internationally recognized, in particular through its research partnership with Safran, Cenaero is mainly active in the aerospace, process engineering, energy and building sectors.

Cenaero provides expertise and engineering services in multidisciplinary simulation, design, and optimization in the fields of mechanics (fluid, structure, thermal and acoustics), manufacturing of metallic and composite structures as well as in analysis of in-service behavior of complex systems and life prediction. Cenaero 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 machine learning-based optimization platform Minamo. Cenaero operates the Tier-1 Walloon supercomputing infrastructure, that is currently composed of 14,000 computing cores and will be renewed by the end of 2022 with an investment of 10 M€.

To sustain its expanding research activities in the development of **optimization and machine-learning** methodologies and strengthen the **Minamo development** community, Cenaero is currently looking for a talented **Software Development Engineer** (M/F) and offers a permanent contract (CDI) in **Belgium**.

Position

The candidate will contribute to research and development activities in the field of advanced optimization techniques related to the production of Cenaero's scientific software Minamo with a direct connection to industrial needs and applications. He/she will have the opportunity to be on top of the latest advancements in optimization, reduced-order modeling, machine learning and data analysis. He/she will be part of the full development cycle from design and coding to testing and documentation following the development rules already in place. He/she should have a proactive attitude and be able to propose new ideas or solutions to answer various demands of our research partners and clients.

Profile

Required qualifications

- MSc or PhD in Applied Mathematics, Computer Science or Engineering/Science
- Proficiency in C++ object-oriented programming
- Strong background in applied mathematics, in particular expertise in optimization, reduced-ordered modeling and machine learning
- Experience in collaborative software development
- Ability to learn new architecture, tools and algorithms, deeply and quickly
- Strong analytical thinking and problem-solving skills
- Good communication skills (written and spoken) in French and English
- Team player and proactive attitude

Additional qualifications

- Experience with Python
- Working experience with Machine Learning frameworks and libraries

- Cross-platform experience (Linux/Windows)
- Experience in user interfaces development

Offer

Cenaero offers a position in growing and leading technological sectors, a direct relationship with their business actors and technical experts, a competitive salary package and a stimulating and dynamic work environment.

Contact

Interested candidates should send a cover letter, quoting reference number of the offer (BE-JO-2022-007), and a resume to RH_BE-JO-2022-007@cenaero.be