

Multiphysics CFD Developer – (MultiP2_2021)

CFS are looking for a person to contribute to our team implementing and developing our solver capabilities to simulate Multiphysics and reacting flows, like those found in IC engines, gas turbines...

- Requirements:
 - Experience in Multiphysics simulations, especially combustion modelling, and/or multiphase, sprays, free surface flows, films, particles...
 - Good programming skills in C or Fortran
- Valued skills:
 - Finite volume methods and numerical methods
 - parallel programming (specially using MPI)
 - Experience in industry or commercial solvers
 - Knowledge of chemical kinetics packages, as Cantera or Chemkin

About Cambridge Flow Solutions:

Our core business has always been to add value to our clients' CFD/CAE process chain and to develop customised software to augment their capabilities. Building on our deep technical knowledge and experience, our approach centres on the key aspects that govern the simulation process:

Integration: to create highly automated software which promotes efficient, multidisciplinary simulation across all business areas.

Removal of bottlenecks: to overcome the constraints that prevent rapid and effective simulation within industrial design and analysis environments.

Parallelism: to offer products and solutions based on fully parallelised and scalable software both for rapid turnaround and for medium to large problem sizes.

Robustness and quality: to deliver high-quality and robust integrated simulation workflow on geometries of arbitrary size and complexity.

Customised CFD

We have many years of CFD and software development experience and this allows us to develop and implement simulation software which we can tailor to the specific requirements of our partners. Our primary product is BOXERmesh, which we develop and sell commercially, but we also work with a wide range of 3rd party software. We maintain active development of our software products, in response to feedback from partners and customers. True to our aim of further promoting practical, fully integrated simulation workflows, we have now extended our core capabilities into the additional areas of geometry handling, editing & management, BOXERgeom and flow solving, BOXERsolve.

Applications Engineering:

CFS provides application support to our range of industrial clients and partners, further improving their capabilities and adding value. We pride ourselves on close and regular customer contact, and have extensive, practical experience in developing and applying:

- Unstructured mesh generation
- Geometry management & editing - including mesh deformation techniques
- CAD import & tessellation for mesh generation, and geometry parameterisation for optimisation
- Steady/unsteady RANS CFD & LES/DES
- Conjugate aero/thermal simulation
- Parallelised software architecture
- GUI development

With offices on the world-renowned Cambridge Science Park, UK and in Kobe, Japan, and soon to open an office in the US, we are continually looking for exceptional talent, particularly in the areas of Computing, CFD/CAE applications engineering, consulting, sales and support. We offer stimulating work in a young and dynamic company with exciting prospects.

Salary is £35,000 - £45,000 pa. negotiable depending on experience.

Please email with a stated salary expectation and the job reference, MultiP2_2021 when applying. Only applications with this salary information will be considered.

Closing date: 25 November 2021

Please forward all applications to careers@cambridgeflowsolutions.com