

## **CAE Software Developer – (CAE2020)**

CFS is looking for a C++ software engineer with experience of both mesh generation and simulation (preferably CFD or FEA) to work with our parallel software, BOXER (meshing) and NEWT (RANS/LES) & geometry. With a good honours degree, and commercial coding experience, you will be skilled at implementing solutions to challenging technical problems. Working with, and extending, our existing C++ framework, you will join our development team to create and maintain functionality in areas from Fluid Structure Interaction to Design Topology Optimisation.

Knowledge of CAD/CAE, mesh generation and simulation in a Linux/Windows environment is required. Industrial experience would be useful. but not essential. CFS will support and train enthusiastic and able employees.

### **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

Our deep CFD and software development experience 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. Our flow solver, NEWT, delivers RANS and very economical LES simulation integrated with BOXERgeom & BOXERmesh. We are also adding progressive multi-physics capability.

**Applications Engineering:**

CFS also 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 CAD 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 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 negotiable depending on experience.**

**Please email with a stated salary expectation when applying. Only applications with this salary information will be considered.**

Closing date: 10 August 2020

Please forward all applications to [careers@cambridgeflowsolutions.com](mailto:careers@cambridgeflowsolutions.com)