



Student Internship – Software Engineering

About CFMS

The Centre for Modelling and Simulation (CFMS) is a growing, independent digital engineering consultancy providing technical expertise to help organisations create cutting edge solutions by pioneering new approaches to product development and enabling innovation services.

Working with commercial and research organisations of all sizes, CFMS has a full portfolio of digital innovation capabilities, including design and analysis services, consultancy, and IT infrastructure, CFMS uses digital innovation across the cyber-physical landscape (including a new robotics capability) to help develop more effective engineering solutions across industrial sectors critical to the UK economy.

As a commercially focused organisation we reinvest profits from commercial activity into the continued development of our people, facilities, and research capability.

We have an exciting range of technologies and development programmes across a range of sectors (aerospace, automotive, construction, energy and transport), all requiring advanced simulation, model based engineering, data science, and robotics expertise and underpinned by our in-house IT infrastructure.

About the role

We work with companies who are experienced in the use of mathematical modelling and those wanting to make greater use of simulation. We collaborate closely with academics and technology partners to create and evaluate new modelling algorithms and techniques, and how these scale and apply to High Performance Computing (HPC).

This role is suited to a candidate with an interest in software engineering and looking for experience in an industrial environment. It will be focussed on developing and deploying software that is used across the organisation and underpins the simulation work we do. The role will primarily involve using software engineering techniques to implement required functionality, using web-based frameworks, databases, containerisation, and a broad array of other technologies as appropriate.

You will be exposed to an assortment of modern tools and technologies that are used to control the deployment and usage of hardware within CFMS. The tools will be developed into robust software, integrated with other existing applications, and deployed across diverse compute resources.



Role and Responsibilities

Roles and responsibilities are dependent upon the candidate, and will include elements of:

- Collaboration with other CFMS technical team members on development, testing and benchmarking activities of software
- Software engineering to develop new functionality and capabilities
- Working with end users to understand their needs and requirements
- Presenting results to a range of audiences in varied formats including presentations and written reports

Skills Required

- Ability to think logically and apply knowledge to solve problems
- Background in software engineering, ideally in a STEM subject
- Awareness of and interest in software engineering concepts such as web-based frameworks, containerisation and development and deployment practices
- Ability and interest to engage with new technology and concepts
- Ability to work well with others
- Ability to liaise with customers and technology partners/suppliers
- Ability to explain technical concepts to both technical and general audiences

How to Apply

Please send your up-to-date CV and a covering letter to: Recruitment Manager, email: careers@cfms.org.uk, with the subject line of your email: "Internship - Software Engineering"

This is a 12 month Internship: 2nd September 2024 until 29th August 2025.